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SURFACE WATER SUPPLY of the UNITED STATES

1937

Part 13

SNAKE RIVER BASIN

NATHAN C. GROVER, Chief Hydraulic Engineero G. H. CANFIELD, LYNN CRANDALL, ROBERT FOLLANSBER T. R. NEWELL, G. L. PARKER, AND A. B. EURTON District Engineers

Prepared in cooperation with the States of Sta



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SURFACE WATER SUPPLY OF SNAKE RIVER BASIN, 1937

SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the water year ending September 30, 1937. The work was begun in 1888 in connection with special studies relating to irrigation.

Measurements of stream flow have been made at about 7,200 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1937, 3,380 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points.

In the execution of the work many State and private organizations have cooperated, either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 8.

DEFINITION OF TERMS

The units in which stream-flow data are presented in this report and other terms used herein are defined as follows:

"Second-feet" is an abbreviation for "cubic feet per second." A second-foot is a rate of flow of 1 cubic foot per second, or the rate of discharge of water flowing in a channel when the cross-sectional area is 1 square foot and the average velocity is 1 foot per second.

"Second-feet per square mile" is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

"Run-off in inches" is the depth to which an area would be covered if all the water flowing from it in a given period were uniformly distributed on its surface. It is used for comparing run-off with rainfall, which is usually expressed in inches.

An "acre-foot", equivalent to 43,560 cubic feet, is the quantity required to cover an acre to the depth of 1 foot. The term is commonly used in connection with storage for irrigation.

"Second-foot-day" is the volume of water represented by a flow of 1 second-foot for 24 hours.

"Stage-discharge relation" is an abbreviation for the term "relation of gage height to discharge."

"Control" is a term used to designate the natural section or reach of the channel or artificial structure below the gage which determines the stage-discharge relation at the gage.

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either

from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge. Typical gaging stations, equipped with water-stage recorder and measuring cable and car, are shown on plate 1.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily gage height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station in the area covered by this report usually comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and run-off. Skeleton rating tables are published except for those stations whose daily discharge for the greater part of the year was determined by shifting-control method or by use of slope or other special methods.

The description of the station gives the type of gage, its latitude and longitude determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. Information under "Extremes" gives the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation, and also the minimum discharge if useful; and the minimum gage height except when it is of no importance. Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum represents the lowest discharge unless otherwise qualified.

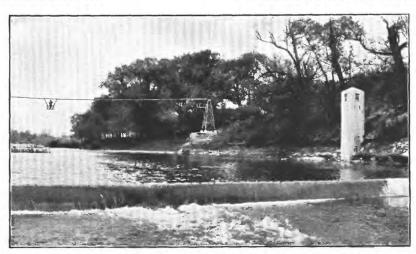
The table of daily discharge gives, for stations equipped with nonrecording gages, the discharge in second-feet corresponding to once-daily or the mean of twice-daily readings of the gage. For stations equipped with water-stage recorders the table gives the discharge corresponding to the mean daily gage height except for stations on stream subject to sudden or rapid fluctuation. For stations subject to such fluctuation the mean daily gage height may not indicate the true mean daily discharge, which must be obtained by averaging the discharge for intervals of the day or by using the discharge integrator, an instrument for obtaining the mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Second-foot-days" gives the sum for each month of the discharge given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily (1) on the permanency of the stagedischarge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

The station description gives a statement under "Remarks" in regard to the general accuracy of the records. "Excellent" indicates that, in general, the daily records are



A. ARTIFICIAL CONTROL, RECORDER HOUSE, AND MEASURING CABLE ON OLENTANGY RIVER, DELAWARE, OHIO.



B. RECORDER HOUSE AND MEASURING CABLE ON KAWEAH RIVER, THREE RIVERS, CALIF.

TYPICAL RIVER-MEASUREMENT STATIONS.

PUBLICATIONS 3

in error not more than 5 percent; "good", not more than 10 percent; "fair", not more than 15 percent; and "poor", over 15 percent.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and depth in inches may be subject to gross errors caused by the inclusion of large noncontributing districts in the measured drainage area, by lack of information concerning water diverted for irrigation or other use, or by inability to interpret the effect of artificial regulation of the flow of the river above the station. "Second-feet per square mile" and "run-off in inches" are therefore not computed if such errors appear probable. The computations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches.

Many gaging stations on streams in the irrigated areas of the United States are situated above most of the diversions from those streams, and the discharge recorded does not show the water supply available for further development, as prior appropriations below the station must first be satisfied.

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published, and that greater degrees of refinement in computations and records may be warranted with increased data and use of improved equipment.

PUBLICATIONS

The results of stream-flow measurements are now published annually in 14 parts, each part covering an area whose boundaries coincide with natural drainage features as indicated below:

North Atlantic slope basins (St. John River to York River). South Atlantic slope and eastern Gulf of Mexico basins (James River to 2. Mississippi River).
Ohio River Basin.
St. Lawrence River Basin.

3.

Hudson Bay and upper Mississippi River basins. Missouri River Basin. Lower Mississippi River Basin. Western Gulf of Mexico basins. 5.

6.

8.

9.

10.

Colorado River Basin.
The Great Basin.
Pacific slope basins in California.
Pacific slope basins in Washington and upper Columbia River Basin.

13 Snake River Basin.

Pacific slope basins in Oregon and lower Columbia River Basin.

Water-supply papers and other publications of the Geological Survey containing data in regard to the water resources of the United States may be obtained or consulted as indicated below.

- 1. Copies may be purchased at nominal cost from the Superintendent of Documents, Government Printing Office, Washington, D. C., who will, on application, furnish lists giving prices.
- 2. Sets of the reports may be consulted in the libraries of the principal cities in the United States.
- 3. Sets are available for consultation in the local offices of the water-resources branch of the Geological Survey as follows:

Augusta, Maine, Statehouse. Boston, Mass., 945 Post Office Building. Hartford, Comm., 203 Federal Building. Albany, N. Y., 526 Federal Building. Trenton, N. J., 228 Federal Building.

Harrisburg, Pa., 490 Education Building.
Charlottesville, Va., University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 220 Post Office Building.
Columbia, S. C., 119 United States Courthouse.
Atlanta, Ga., Georgia School of Technology.
Ocala, Fla., Post Office Building.
Montgomery, Ala., Post Office Building.
Montgomery, Ala., Post Office Building.
Columbus, Ohio, Engineering Experiement Station, Ohio State University.
Indianapolis, Ind., 319 Federal Building.
Urbana, Ill., 14 Post Office Annex.
Madison, Wis., 337N State Capitol.
St. Paul, Minn., 808 New Post Office Building.
Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.
St. Louis, Mo., 908 Customhouse, 1114 Market Street.
Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines and Metallurgy.
Topeka, Kans. 305 Federal Building.
Fort Smith, Ark., Post Office Building.
Austin, Tex., State Highway Building.
Santa Fe, N. Mex., 3 United States Courthouse.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 230 Customhouse.
Salt Lake City, Utah, 303 Federal Building.
Belena, Mont., 412 Federal Building.
Helena, Mont., 412 Federal Building.
Helena, Mont., 412 Federal Building.
Son Francisco, Calif., 208 Federal Office Building.
Fortland, Oreg., 606 Post Office Building.
San Francisco, Calif., 208 Federal Office Building.
Forsiand, Oreg., 606 Post Office Building.
San Francisco, Calif., 208 Federal Building.
San Francisco, Calif., 502 Eighth and Figueroa Building.
Honolulu, Hawaii, 225 Federal Building.

A list of the Geological Survey publications may be obtained by applying to the Director, Geological Survey, Washington, D. C.

Records of flow of streams in the United States have been published in the reports tabulated as follows:

Stream-flow data in reports of the Geological Survey (A = Annual Report; B = Bulletin; W = Water-Supply Paper)

Report	Character of data	Year
10th A, pt. 2 11th A, pt. 2 12th A, pt. 2 13th A, pt. 3 14th A, pt. 2 B 131	Descriptive information only	1884 to Sept. 1890. 1884 to June 30, 1891. 1884 to Dec. 31, 1892. 1888 to Dec. 31, 1893. 1893-94.
16th A, pt. 2 B 140	Descriptive information only	1895.
W 11 18th A, pt. 4	Gage heights (also gage heights for earlier years). Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1896. 1895–96.
W 15	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16	Descriptions, measurements, and gage neights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28	Measurements, ratings, and gage heights, Arkansas River and western United States.	1896.
20th A, pt. 4 W 35 to 39	Monthly discharge (also for many earlier years) Descriptions, measurements, gage heights, and ratings.	1898. 1899.
21st A, pt. 4 W 47 to 52		1899. 1900.
22d A, pt. 4. W 65, 66	Monthly discharge	1900. 1901.
₩ 75	Monthly discharge	1901.

Note .- The reports which contain records after 1901 are given in the table on page 5.

Numbers of water-supply papers containing results of stream measurements, 1899-1837 (For basins included see p. 3)

14	38 51 66, 75 85 100	135 u 177, 178 214 252	285 285 212 265 27 28 29 29 29 29	414 444 464 484 415	534 554 574 594 614	634 654 674 694	722 739 754 769 7969 834
13	38 51 66, 75 85 100	135 178 214 252	312 312 332-B 362-B	413 463 483 513	533 553 573 593 613	633 673 693 897 807	723 723 753 768 793 813 833
12	38 51 66, 75 85	135 178 214 252	292 312 332-A 362-A	412 442 462 482 512	532 552 572 592 612	6522 6522 692 707	722 737 757 767 792 812 832
11	38, f 39 51 66, 75 85 100	134 177 213 251	3331	411 441 461 481 511	531 551 571 591 611	631 651 671 691 706	721 736 751 766 791 811
10	58, e 39 51 66, 75 85	153, 8 134 176, 8 177 212, 8 213 250, 8 251	•	410 440 460 480 510	530 550 570 610	630 650 670 690 705	720 735 750 765 790 810 830
6	d 37, 38 50 66, 75 100	135 175, t 177 211, t 213 249	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	409 439 459 479 509	529 549 569 569 609	629 649 669 689	719 749 764 789 809 829
ω	57 50 66, 75 84	132 174 210 248	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	408 438 478 508	528 548 568 588 608	628 648 668 688 703	718 733 748 763 763 808 828
7	37 50 50 65, 66, 75 k 83, 84 k 98, 99	k 128, 131 k 169, 173 k 205, 209	284 307 327 357 357	407 437 457 477 507	527 547 567 567 587 607	627 647 667 687 702	717 732 747 762 762 787 807
9	65, 37 49, 150 66, 75 k	130, r 131 208 208 246 266	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	4 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	546 546 586 60 60	6 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	716 731 746 761 761 806 806
5	36 49 k 65, 66, 75 k 83, 85 k 98, 99, n 100	k 128, 130 207 207 245	385 385 385 385 385 385	4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	522 545 565 585 605	625 645 665 655 700	715 730 745 760 760 785 805 825
4	36 49 65, 75 m 82, 83	129 170 244 244	2000 2000 4000 4400 4400 4400	404 454 474 407	524 544 564 584 604	684 448 448 488 488	714 729 744 769 784 804 824
3	36 48, 1 49 65, 75 83 98	128 169 243 243	3 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	204 204 204 204 204 204	5.43 5.43 5.63 5.63 5.03	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	713 728 743 768 783 803
CQ.	b 35, 36 65, 75 b 82, 83 b 97, 98	q 126, 127 q 167, 168 q 203, 204	32 22 23 23 23 23 23 23 23 23 23 23 23 2	408 438 458 478	542 542 562 562 562 562	688 688 688 688	712 727 742 767 782 802 822
1	35 47, h 48 65, 75 92	o 124, p 125, q 126 o 165, p 166, q 167 o 201, p 202, q 203	281 281 301 321 321 331	401 431 451 451 601	521 541 561 561 561 601	621 641 661 661 681	711 726 741 756 756 801 821
Year	1899 a 1900 g 1902 1903	1904 1905 1906 1907-8	1910 1911. 1912	1915 1916 1917 1918	1921 1922 1923 1924	1926 1927 1929	1931 1932 1934 1935 1936

a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in 21st Annual Report, part 4. b James River only.

o Gallath River...

o Gallath River...

o Gallath River...

o Kolave Alter only.

Kings and Kern Rivers and south Pacific slope basins.

f Kings and Kern Rivers and south Pacific slope basins.

Rathg tables and index to Water-Supply Papers 47-85 and data on precipitation, wells, and irrigation in Gallatornia and Undo. outsined in Water-Supply Paper 82.

Monthly discharge for 1900 in 22d Annal Report, part 4.

I Scioco River.

1 Scioco River.

J Loup, Platte, and Elathorn Klavers and tributaries below Flatte River.

E Tributaries of Missiasippi River from east.

I lake Ontario and tributaries to St. Lawrence River proper.

I Hadeon Bay only.

New England rivers only.

Hadeon River to Delaware River, inclusive.

P Hadeon River to Delaware River, inclusive.

P Latter and Kasas Rivers and Tributaries of Succession River Basins.

The Great Basin in California, except Truckee and Carson River Basins.

Bellow Junction with Clia River.

Rogos, Umpotus, and Siletz Rivers only.

6 PUBLICATIONS

The foregoing table gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1899 to 1937. The data for any particular station will, in general, be found in the reports covering the years during which the station was maintained. For example, the data from 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

The records at most of the stations discussed in these reports extend over a series of years. Miscellaneous measurements at many points other than regular gaging stations have been made each year and are published under "Miscellaneous discharge measurements" at the end of each report in the same relative order as the regular gaging stations. An index of the records obtained prior to 1904 has been published in Water-Supply Paper 119.

From time to time reports have been published that are compilations of records for various areas, usually a single State or drainage basin. These reports contain records previously published (some of which have been revised), as well as some records not contained in the annual series of water-supply papers. The following table gives the numbers and titles of these reports, arranged in alphabetical order by States and drainage basins.

Reports containing compilation of discharge by States and drainage basins

Water-Supply Paper	Year ending	State or drainage basin and title
		STATE
107	1903	Alabama, Water powers of, with an appendix on stream measurements in Mississippi.
298	1912	California, Water resources of, part 1, Stream measurements in Sacramento River Basin.
299	1912	California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.
300	1912	California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific coast river basins.
447 597e 636d 636e 637a	1918 1927 1927 1927 1927 1927	California, Surface water supply of the southern Pacific slope of California, Surface water supply of Sacramento River Basin. California, Surface water supply of San Joaquin River Basin. California, Surface water supply of Pacific slope basins in. California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.
74 197 415 230 370 424 492 469	1900 1905 1915 1906 1910 1916 1919	Colorado, Water resources of. Georgia, Water resources of. Massachusetts, Surface waters of. Nebraska, Surface water supply of. Oregon, Surface water supply of. Vermont, Surface water sof. Washington, Summary of hydrometric data in. Wyoming, Surface waters of, and their utilization.
395 617 517 618 198	1914 1927 1920 1926 1906	DRAINAGE BASIN Colorado River (Colo., Utah, etc.) and its utilization, 1916. Colorado River, upper (Colo., Utah), and its utilization, 1929. Great Salt Lake Basin, Water powers of, 1924. Green River (Wyo., Utah) and its utilization, 1930. Kennebec River Basin (Maine), Water resources of, 1907. Milk River. (See St. Mary and Milk Rivers.)
536	1920	New-Kanawha River Basin (W. Va., Va., N. C.), Surface water supply of. 1925.
279 192 358	1909 1906 1913	Penobscot River Basin (Maine), Water resources of, 1912. Petomac River Basin (W. Va., Va., Md., etc.), 1907. Rio Grande Basin (N. Mex., Tex., etc.), Water resources of, 1888-1913.
491	1917	St. Mary and Milk Rivers (Mont. and Canada), Water supply of, 1920.
109	1904	Susquehanna River Basin (Pa., Md.), Hydrography of, 1905.

In addition to the records noted above, records of discharge have been published in State reports. Some of these are not contained in the publications of the Geological Survey or are revisions of records previously published in its water-supply papers. The following table contains a list of these reports.

PUBLICATIONS

State reports containing compilation of records of discharge

State	Year ending	Report	Issued by
Alabama Arkansas Georgia Illinois Do Indiana	1915 1928 1920 1937 1911 1927	Bull. 17, Water powers of Alabamastream gaging report 1. Bull. 36, Water powers of Georgia. Stream flow data of Illinois. Water resources of Illinois. Pub. 72, Surface water supply of	Geological Survey of Alabama. Arkansas Geological Survey of Geological Survey of Georgia. Division of Waterways. Rivers and Lakes Commission. Department of Conservation.
Do	a1930	Indiana. Pub. 112, Surface water supply of Indiana.	Do.
Iowa Kansas Do Do Kentucky Minnesota	b1932 b1919 c1924 d1928 1920 1912	Stream-flow records of Iowa	Iowa State Planning Board. Kansas Water Commission. Do. Do. Kentucky Geological Survey. State Drainage Commission.
Missouri	1926	Minnesota. Reports of Bureau of Geology and Mines, Vol. 20, 2d series, Water	Missouri Bureau of Geology and Mines.
Nebraska	1914	Resources of Missouri. 1st hydrographic report	Bureau of Water Power, Irri- gation and Drainage.
Do New Jersey.	⁰ 1928 1928	2d hydrographic report	Do. Department of Conservation and Development.
Do	f ₁₉₃₄	Special Report 5, Surface water supply of New Jersey.	State Water Policy Commis- sion.
New Mexico. North Caro- lina.	1925 1923	Surface water supply of New Mexico Bull. 34, Discharge records of North Carolina streams.	Office of the State Engineer. Department of Conservation and Development.
Oregon	1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do	g ₁₉₂₄	Bull. 7, Water resources of the State of Oregon.	Do.
Do	h ₁₉₃₀	Bull. 8, Water resources of the State of Oregon.	Do.
Do	¹ 1936	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania	1911	Report of Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do	J ₁₉₃₂	Stream-flow records of Pennsylvania	Department of Forests and Waters.
Tennessee	1924 k ₁₉₃₀	Bull. 34, Water resources of Tennessee.	Department of Education.
Do Utah Virginia	1905 1927	Bull. 40, Surface waters of Tennessee 5th Biennial Report, State Engineer Bull. 31, Water resources of Virginia	Office of the State Engineer. Conservation and Development Commission.
Washington.	1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin	1914	lst report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do	1 ₁₉₂₃	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.
b Include c Include d Include e Include	es recor es recor es recor es recor	ds for the years 1895-1919. h Includes ds for the years 1919-24. 1 Includes ds for the years 1914-28. 4 Includes ds for the years 1914-28. 4 Includes ds for the years 1928-34.	records for the years 1914-24. records for the years 1924-30. records for the years 1920-36. records for the years 1928-32. average weekly discharge for rrs 1920-30. records for the years 1914-23.

Note. In addition to the records contained in the reports listed above, the following States have issued annual or biennial reports in which are contained records of discharge: California, Colorado, Idaho, Indiana, Missouri, Montana, Nebraska, New Mexico, New York (also New York City Board of Water Supply), North Dakota, Oregon, Pennsylvania, Utah, Washington, and Wyoming.

8 COOPERATION

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The following table contains a list of gaging stations for the area covered by this report at which records of daily discharge were collected during the water year October 1936 to September 1937 by agencies other than the Geological Survey. The records for these stations are not contained in the publications of the Geological Survey.

Records of daily discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Operated by	Remarks
Antelope Reservoir	Near Danner, Oreg	1925-27, 1930,	State engineer	(*)
Bully Creek Grand Ronde River	Vale, Oreg Below Chicken Creek, near Starkey, Oreg.	1932-37 1933-37 1935-37	do State engineer	(*) *)
Inflow to American Falls Reservoir.	Near American Falls, Idaho.	1927-28, 1932-36 1937	Idaho Water District No.36	(†)
		(fragmen-		
Inflow to proposed Island Park	Near Island Park, Idaho	1935-37	U. S. Bureau of Reclamation.	Unpublished.
Reservoir. Inflow to Teton Basin.	Teton Basin, Idaho	July to Sept. 1937	Idaho Water District No.36	(†)
Jack Creek	Near mouth, near Danner, Oreg.	1925, 1930,	State engineer	(*)
Jordan Creek	9 miles west of Jordan Valley, Oreg.	1932-37 (frag- mentary) 1930-31, 1933-37 (frag- mentary)	do	(*)
Malheur River	Below Nevada Dam, near Vale, Oreg.	‡1934 – 37	do	(*)
Do Malheur River, North Fork of.	Near Namorf, Oreg Junctura, Oreg	1929-37 1926-32 1935-37	do	(*)
Teton River	Near Tetonia, Idaho	July to Sept.	Idaho Water District No.36	(†)
Wallowa Lake Reservoir.	Above Joseph, Oreg		State engineer	(*)
Wallowa River	Below Wallowa Lake, Oreg.	‡1926 - 37	do	(*)

^{*}Records for stations operated by State engineer of Oregon published in State engineer Bulletins 4 (to 1914), 7 (1915-24), 8 (1925-30), and 9 (1931-36); 1937 unpublished. †Published in reports of Idaho Water District No. 36. †Records for some earlier years published in water-supply papers of Geological Survey.

COOPERATION

The work was done under cooperative agreements with the several States as follows: In Idaho, with the Department of Reclamation, R. W. Faris, commissioner; in Oregon, with the State engineer, Charles E. Stricklin; in Washington, with the State Department of Conservation and Development, J. B. Fink, director, and C. J. Bartholet, supervisor of hydraulics; and in Wyoming, with the State engineer, John D. Quinn.

Acknowledgments for financial assistance in collecting the records published herein are due also to the Corps of Engineers, United States Army; the Office of Indian Affairs, and the Bureau of Reclamation, United States Department of the Interior; the Weather Bureau, the Soil Conservation Service, and the Forest Service, United States Department of Agriculture.

Assistance in collecting records was also rendered by the following municipalities, organizations, corporations, and individuals: In Idaho by the city of Pocatello, Idaho Power Co., Weiser Irrigation District, Lake Irrigation District, Washington Water Power Co., Board of Control for Boise Project, Yellow Pine Co., Mesa Orchards Co., Idaho Water District No. 36, city of Idaho Falls, North Side Canal Co., Jackson Hole Light and Power

Co., Utah Power & Light Co., watermasters for Big Lost River, Mud Lake, Little Lost, Big Wood, Little Wood, Boise, and Weiser Rivers; in Oregon by the Warmsprings Irrigation District, Malheur, Baker, Union, and Wallowa Counties, Eastern Oregon Light & Power Co., and Inland Power & Light Co.; and in Washington by the Washington Water Power Co.

DIVISION OF WORK

The data for stations on the Snake River at and above Milner, Idaho, on tributaries that enter that stream above Idaho Falls (except in the Salt River Basin in Wyoming), and on the Blackfoot River near Blackfoot, Idaho, were collected and prepared for publication under the supervision of Lynn Crandall, district engineer. For all other stations in Idaho, the stations on the Snake River at Oxbow, Oreg., and Salmon Falls Creek near San Jacinto, Nev., the data were collected and prepared for publication under the supervision of T. R. Newell, district engineer.

For all other stations in the several States the data were collected and prepared for publication under the supervision of district engineers as follows: In Oregon, G. H. Canfield, the work being done in collaboration with Charles E. Stricklin, State engineer; in Washington, G. L. Parker; in Wyoming, Robert Follansbee; and in Nevada, A. B. Purton.

SNAKE RIVER MAIN STEM

Jackson Lake at Moran, Wyo.

Location.- Staff gage, lat. 43°51', long. 110°35', in sec. 18, T. 45 N., R. 114 W., a short distance above lake outlet at Moran. Zero of gage is 6,700 feet above mean sea level.

Records available .- June 1909 to September 1937. Those for 1909 and 1910 are fragmentary,

Remarks. - Jackson Lake impounds water for irrigation of lands in Snake River Valley, Idaho.

It has a capacity of 847,000 acre-feet between elevations 6,730 and 6,789 feet, respectively, above mean sea level. Gage-height record and capacity table furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1936 to September 1937

_	T	-		7				W	June	P-2-	A	gt
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	361,320	376.950	388,470	408,550	431.500	457.370	477.510	504,240	736,150	849,280	610.260	341.220
2	361,980	377,400	388,690	409,220	432,400	458.050	478,890	505,400	742,820	847,480	601,660	334,060
3	362,630	377,840		409,670				506,550				326,690
			389,800		435,530	459,420 459,870		507,940				320,470 314,240
6	364 - 610	379.170	390 460	411,680				•		-	•	308,020
7	365,270	379,610	391,570	412,130	438,040	461.010						302,050
8	365,710	380,050	680,392	412,800	439,180	461,700	483,470	518,630	786,230	819,500	559,550	296,540
1 30	366,140	380,500	393,790	413,250 413,690		462,160		525,370				293,360
10	300,500	300,840	384,240	410,090	440,320	462,850	484,850	531,190	800,050	813,190	557,280	290,180
11	367,020	381,380	394,690	414,140	441,230	463,300	485.550	537.040	807,630	811,670	526,070	287,840
12	367,460	381,600	395,140	414,590	442,140	463,990	486,240	541,720	811,930	807,380	514,220	286,780
1 13	368,340	382,270	395,580	415,040	443,040	464,450		546,640 551,320				286,150 285,510
	368,780		396,480			465,140 465,600	458.550			785,730		283,610
16	360 910	20.2 200	200 200	436 360	440 000					,		0770 7700
17	369,650	383.820	397,820	417,520	446,000	466,280						278,380 271,250
18	370,090	384,040	398,270	419.320	448.500	467.430						265,600
19	370,750	384,480	398,710	420,900	449,870	467,890	492,240	596,200	849,020	752,260	448,500	260,610
20	371,410	384,700	399,160	422,930	451,000	468,580	493,390	609,780	850,050	742,580	441,000	255,860
21	372,080	385,150	399,830	423,830	451,460	469,030	494.550	618.380	852.610	732.690	432.400	250,480
22	372,520	385,370	400,730	424,510	451,910							246,760
24	373,410	386,810	402,620	424,960 425,410	452,600	470,410		635,660				243,660
	373,850	386,480	403,180	425,860		471,100 471,780		647,680 656,880				240,990 237.120
1	1	1	1	1		1				1	1	
27	374,290	387.140	404.750	420,760	456,320	472,470 473,160		671,890 684.080				233,650 232,630
28	375,180	387,360	405,420	428,340	456,690			694.570				231.820
29	375.620	387,800	406,320	429,240		474,760	501,930	709,530	852,870	639,990	365,920	231,820
31	376,070 376,510		407,210		-	475,450		721,560				232,020
	010,510	<u> </u>	201,080	#30,82U	-	476,370	-	729,470		RTR 280	349,700	

Snake River near Moran, Wyo.

Location.- Water-stage recorder, lat. 43°51', long. 110°34', in sec. 17, T. 45 N., R. 114 W., 1½ miles east of Moran and Jackson Lake Dam and 3½ miles above Pacific Creek.

Drainage area .- 820 square miles.

Records available .- September 1903 to September 1937.

Average discharge. - 34 years (1.433 second-feet).

Extremes. - Maximum discharge during year, 7,610 second-feet July 23 (gage height, 7.08 feet); minimum, 23 second-feet on several days during winter (gage height, 0.28 foot). 1903-37: Maximum discharge, 15,100 second-feet June 12, 1918 (gage height, 10.41 feet); practically no flow during a few days in 1907 and 1909.

Remarks.- Records excellent except those for Oct. 1 to June 10, which are good. Gates at dam were closed Oct. 3 to June 10. Staff gage read twice weekly Oct. 1 to June 10; water-stage recorder used during remainder of year. Flow controlled by operation of outlet gates at Jackson Lake.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

15 59	383 539		1,160		2,650 3,260		5,560 6,470
140 250	715 926	3.2	1,750	5.0	3,940	7.5	8,480

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	40 33 28 28 28	25 25 25 25 25 25	24 24 23 23 23	25 25 25 24 24	25 25 25 25 25 25	25 25 25 25 25 25	26 28 28 27 27	45 50 56 63 72	25 34 43 34 25	3,080 3,050 3,590 4,960 5,030	5,320 5,530 5,530 4,740 3,250	4,500 4,320 3,900 3,630 3,620
6 7 8 9 10	28 28 28 28 25	25 25 25 25 25 25	23 24 25 24 24	23 23 23 25 25	25 25 25 25 25 25	25 25 25 24 24	26 26 25 25 28	82 87 92 77 66	24 23 24 25 26	4,750 4,060 3,800 2,950 2,100	3,130 3,390 5,220 6,850 6,930	3,550 3,400 2,690 2,170 1,890
11 12 13 14 15	25 25 25 25 25	25 25 25 25 25 25	23 23 23 23 24	25 25 25 25 25 25	25 25 24 23 23	24 24 24 25 25	32 32 32 32 32 32	54 56 59 56 54	727 1,230 1,290 1,120 977	3,120 4,510 5,490 5,700 5,300	6,790 6,850 6,470 5,870 5,510	1,010 650 608 820 2,330
16 17 18 19 20	25 25 25 32 40	25 25 25 25 25 25	24 25 25 25 25 25	25 25 25 24 24	23 23 23 23 23	25 25 25 25 25 25	32 32 32 32 32 32	50 48 46 43 40	1,000 1,730 3,290 3,880 3,910	5,000 5,460 6,100 6,260 6,100	5,420 5,220 4,830 4,560 4,700	3,630 3,340 2,870 2,720 2,830
21 22 23 24 25	36 30 29 28 28	25 25 25 25 25 25	25 25 25 25 25	23 23 23 23 23	23 23 24 24 25	25 25 25 25 25 24	32 32 32 32 32 33	38 36 43 48 54	3,980 4,350 4,860 4,430 3,550	6,950 7,350 7,610 7,370 7,110	4,770 5,020 5,000 4,720 4,610	2,730 2,110 2,020 2,260 2,400
26 27 28 29 30 31	28 27 26 26 25 25	24 24 24 24 24	25 25 25 25 25 25	24 24 25 25 25 25	25 25 25 -	24 24 24 25 25 25	33 35 37 38 40	63 72 101 153 82 50	2,840 2,570 2,820 3,490 3,550	6,890 6,950 7,110 7,010 6,560 6,280	4,540 4,620 4,580 4,560 4,750 4,700	1,290 785 374 250 260

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	873 745 752	40 25 25	25 24 23	28.2 24.8 24.3	1,730 1,480 1,490
Calendar year 1936	410,347	5,850	18	1,121	813,900
January. February Karch. April May. June July August September.	752 679 766 930 1,936 55,877 167,600 157,980 68,947	25 25 25 40 153 4,860 7,610 6,930 4,500	23 23 24 25 36 23 2,100 3,130 250	24.3 24.3 24.7 31.0 62.5 1.863 5,406 5,096 2,298	1,490 1,350 1,520 1,840 3,840 110,800 332,400 313,300 136,800
Water year 1936-37	457,837	7,610	23	1,254	908,000

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Snake River above Greys River, near Alpine, Wyo.

Location. - Water-stage recorder, lat. 43°11', long. lll°00', in SW\(\frac{1}{2}\) sec. 21, T. 37 N., R. II9 W., three-quarters of a mile above Greys River, and 2\(\frac{1}{2}\) miles east of Alpine, Wvo.

Records available .- March to September 1937.

Extremes. - Maximum discharge during period of record, 15,000 second-feet June 24 (gage height 7.81 feet); minimum, 1,080 second-feet March 21, 28 (gage height 0.58 feet).

Remarks. Records excellent except those for period of missing gage heights, April 4-7 (Computed by comparison with records for Greys River near Alpine) and those for periods of partial gage-height record, Apr. 25-27, June 27, July 4-6, 11, 18, 25-27, and Aug. 15-20, (computed by comparison with records for station near Heise), which are good. Flow regulated by storage in Jackson Lake.

Rating table, water year 1936-37 (gage height, in feet, and discharge in second-feet) (Shifting-control method used Mar. 16 to May 30)

.8 1.0 1.4	1,050 1,165 1,300 1,580 1,580	2.6 3.0 3.4	2,210 2,600 3,050 3,580 4,230	4.6 5.0 5.5	5,000 5,860 6,820 8,170 9,650	7.0 7.5	11,270 12,940 14,660 15,710
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Discharge, in second-feet, water year October 1936 to September 1937

Дау	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3			-			=	1,180 1,320 1,290	2,180 2,650 3,240	7,120 6,390 6,510	8,980 8,370 8,020	8,200 7,490 7,600	5,640 5,680 5.590
4 5						=	1,180	3,910 4,430	7,250 6,840	8,600 9,250	7,170 6,320	5,220 5,000
6 7 8						=	1,240 1,200 1.140	5,080 5,300 5,910	5,910 5,350 5,120	9,370 8,920 8,460	5,330 5,160 5,330	4,880 4,880 4,780
9 10						=	1,160 1,210	6,220 5,960	5,300 5,500	8,140 6,940	6,870 8,110	4,250 3,760
11 12 13 14 15						=	1,350 1,290 1,300 1,620 1,930	5,740 5,520 5,590 5,980 6,900	5,500 6,820 7,440 7,000	6,290 6,940 8,000 8,780 8,900	8,080 8,020 8,000 7,660	3,520 2,770 2,370 2,220
16 17 18 19 20		j				1,160 1,170 1,200 1,140 1,140	2,060 1,820 1,710 1,730 1,820	7,630 5,080 5,950 9,870 9,500	7,100 8,170 9,280 10,400 10,900	8,400 7,910 8,430 8,900 8,660	7,300 7,100 6,920 6,720 6,270 6,030	2,210 3,440 4,800 4,520 4,130 3,990
21 22 25 24 25						1,080 1,140 1,150 1,160 1,170	1,930 2,110 1,970 1,800 1,740	8,020 7,380 7,940 9,160 10,100	12,300 13,900 14,500 14,200 11,700	8,630 9,100 9,500 9,560 9,370	6,100 6,100 6,290 6,200 6,000	4,210 4,010 3,640 3,540 3,680
26 27 28 29 50 31						1,140 1,110 1,080 1,100 1,120 1,140	1,940 2,370 2,440 2,260 2,080	10,500 10,300 11,300 12,000 10,400 8,400	10,000 8,900 e,520 8,780 9,280	9,040 8,950 8,870 8,840 8,370 8,780	5,910 5,840 5,860 5,770 5,770 5,930	3,730 2,920 2,420 2,090 1,040

Month	Second- foot-days	Maximum	Minimo	Mean	Run-off in acre-feet
October					
Oalendar year					
January Pebruary March 16-51 April 1 May June July August September	18,200 49,480 224,140 253,120 265,270	1,200 2,440 12,000 14,800 9,560 8,200 5,040	1,080 1,140 2,180 5,120 6,290 5,160 1,840	1,138 1,649 7,230 8,437 8,557 6,627 3,864	98,140 444,600 502,100 526,200 407,500
The period					2,245,000

Snake River near Heise, Idaho

Location.- Water-stage recorder, lat. 43°37', long. 111°40', in sec. 5, T. 3 N., R. 41 E., 3 miles above heise. Zero of gage is 5,014.90 feet above mean sea level.

Drainage area .- 5,740 square miles.

Records available .- September 1910 to September 1937 except for winters of 1914-24.

Average discharge. - 27 years (1911-37), 6,880 second-feet.

Extremes. - Maximum discharge during year, 17,900 second-feet June 23 (gage height, 6.75 feet); minimum, 1,960 second-feet March 27-28 (gage height 1.61 feet).
1910-37: Maximum discharge, about 60,000 second-feet May 19, 1927 (gage height, about 16 feet); minimum, 1,210 second-feet Jan. 22, 1935 (gage height, 1.15 feet).

Remarks.- Records excellent except those for periods of ice effect, Dec. 3-6, Jan. 1 to March 1, which were computed on basis of one discharge measurement, gage heights, and weather records, and are fair. Station is above all irrigation diversions from main river except Riley Ditch (capacity, about 30 second-feet), which diverts 1 mile above gage. About 105,000 acres irrigated by diversions from tributaries above station in both Wyoming and Idaho. Flow regulated by storage in Jackson Lake.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	3,420 3,290 3,250 3,230 3,210	3,020 3,000 2,850 2,730 2,880	2,470 2,470 2,460 2,460 2,460	*2,280		2,180 2,180 2,140 2,080 2,050	2,180 2,280 2,380 2,240 2,160	4,310 5,070 6,500 8,110 9,450	11,800 10,400 9,980 10,700 10,700	11,400 10,700 10,200 10,100 11,100	10,200 9,060 6,900 8,930 8,330	6,960 6,880 6,760
6 7 8 9 10	3,190 3,180 3,160 3,140 3,120	2,900 2,880 2,800 2,740 2,710	2,460 2,450 2,490 2,520 2,450			2,060 2,090 2,140 2,080 2,030	2,180 2,200 2,120 2,140 2,210	10,600 10,800 12,000 12,700 11,900	9,580 8,770 8,360 8,460 8,800	11,200 11,100 10,300 10,200 9,320	6,960 6,590 6,440 7,530 9,190	6,080
11 12 15 14 15	3,100 3,090 3,070 3,050 3,070	2,730 2,740 2,710 2,730 2,730	2,340 2,490 2,280 2,280 2,440			2,060 2,060 2,090 2,090 2,080	2,360 2,450 2,410 2,650 3,270	11,700 10,900 11,000 11,600 13,300	8,710 9,350 10,700 10,300 10,100	8,180 8,420 9,450 10,600 10,800	9,550 9,250 9,350 9,060 8,670	3,730 3,500
16 17 18 19 20	3,070 3,050 3,030 3,070 3,120	2,730 2,730 2,730 2,710 2,680	2,570 2,550 2,470 2,440 2,420			2,090 2,120 2,140 2,120 2,060	3,690 3,660 3,360 3,340 3,530	13,800 14,200 15,000 16,100 15,700	10,100 10,900 12,100 12,700 13,600	10,500 9,740 9,710 10,200 10,400	8,300 8,180 8,020 7,710 7,290	3,890 5,550 5,980 5,340 5,220
21 22 25 24 25	3,140 3,090 3,030 3,000 3,000	2,680 2,680 2,650 2,610 2,580	2,390 2,410 2,420 2,340 2,320			2,050 2,010 2,090 2,080 2,020	3,810 4,240 4,240 3,830 3,630	13,800 12,500 12,800 13,900 14,800	14,400 16,300 17,400 17,400 15,400	9,980 10,500 10,700 11,100 10,800	7,320 7,290 7,380 7,470 7,170	5,200 5,500 4,910 4,740 4,740
26 27 28 29 30 31	3,000 3,000 3,000 2,960 2,960 2,960	2,570 2,530 2,500 2,530 2,530 2,530	2,420 2,410 2,390 2,380 2,300 2,300			2,010 1,960 1,960 1,980 1,990 2,060	4,020 5,070 5,500 5,070 4,440	15,400 15,200 15,700 16,600 15,600 13,300	13,000 11,800 11,000 10,600 11,400	10,500 10,200 10,200 10,200 9,980 9,980	7,080 6,990 7,020 7,020 6,940 7,080	4,980 4,690 3,730 3,480 3,140

Month	Second- foot-days	Maximum	Minimum	Mean	Rum-off in acre-feet
Osteber	96,050 81,590 75,050	3,420 3,020 2,570	2,960 2,500 2,280	3,098 2,720 2,421	190,500 161,800 148,900
Oalendar year 1936	2,603,570	28,600	1,800	7,114	5,164,000
January February Baroh April Lay January Bay	66,650 58,800 64,150 96,650 384,340 344,810	2,180 5,500 16,600 17,400	1,960 2,120 4,310 8,360	2,150 2,100 2,069 3,222 12,400 11.490	132,200 116,600 127,200 191,700 762,300 683,900
July	317,760 246,270 154,670	11,400 10,200 7,140	8,180 6,440 3,140	10,250 7,944 5,156	630,300 488,500 306,800
Water year 1936-37	1,986,790	17,400	1,960	5,443	3,941,000

*Discharge measurement.

Diversions from Snake River between Heise and Shelley gaging stations, Idaho

Between Heise and Shelley gaging stations 50 canals divert water from Snake River for irrigation; 40 divert above mouth of Henrys Fork and 10 below. Most of these canals are equipped with staff gages read once daily; a few have water-stage recorders. Records showing combined discharge of all canals for each irrigation season during 1919 to 1937 are available.

Records good except those for May, which are fair.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Ar	r.	May	June	July	Aug.	Sept.
1 2 3 4 5									464 463 431 503 650	5,390 5,370 5,400	8,170 7,430 7,270 7,220 7,230	6,92 6,94 6,84 6,95	0 5,600 0 5,420 0 5,570
6 7 8 9									652 672 642 749 1,150	5,390 5,500 6,240 6,140	7,670 7,560 7,270 7,120 6,610	6,53 6,29 6,08 6,29 6,52	0 5,660 0 5,330 0 5,240 0 5,210
11 12 13 14 15									1,280 1,580 2,220 2,500 2,980	5,810 5,400 5,420 5,760	6,240 6,530 6,820 7,710 7,790	7,22 7,28 7,03 7,13 7,03	0 4,640 0 4,680 0 4,510 0 4,110
16 17 18 19 20			:						3,550 4,090 5,220 6,190 6,680	7,790 6,140 8,180	7,940 8,020 7,960 8,180 8,380	6,75 6,76 6,52 6,45 6,06	0 4,520 0 4,580 0 4,640
21 22 25 24 25									6,030 7,050 7,270 7,630 8,120	8,630 8,800 9,070	8,340 8,030 8,140 8,140 8,140	6,02 6,22 6,09 5,79 5,90	0 4,520 0 4,440 0 4,130
26 27 28 29 50 51									7,910 8,070 7,990 7,920 7,200 6,510	8,340 8,090 8,160 8,220	8,040 7,840 8,030 8,000 7,980 7,780	6,26 6,24 6,35 5,90 5,81 5,54	0 4,080 0 4,100 0 4,140 0 3,900
		1	lonth		<u> </u>	Second foot-de		Ma	x1mm	Minimum	Mean		un-off in ore-feet
Nove	ember												
Jan Febrara Apr: May Jund July August	Calendar year nuary roh '1 '4 '5 Table Tab		125, 209, 237, 200,	510 580 110		8,120 9,070 8,380 7,280 5,740	43. 5,37. 6,24. 5,54.	0 6 0 7 0 6	,030 ,984 ,664 ,455 ,679	248,300 415,600 471,200 396,900 278,400			
						140,	,510		3,140		1		1,810,000

Note.- Records include discharge of Riley Ditch which diverted 4,200 acre-feet during period from Snake River 1 mile above gaging station near Heise.

Snake River near Shelley, Idaho

<u>Location.</u>— Water-stage recorder, lat. $43^{\circ}25^{\circ}$, long. $112^{\circ}08^{\circ}$, in sec. 17, T. l N., R. 37 E., a quarter of a mile above Woodville Highway bridge and 3 miles north of Shelley.

Records available .- March 1915 to September 1937.

Extremes. - Maximum discharge during year, 14,100 second-feet May 10 (gage height, 9.17 feet); minimum, 810 second-feet Sept. 17 (gage height, 3,80 feet).
1915-37: Maximum discharge, 47,200 second-feet June 17, 1918 (gage height, 16.97 feet); minimum, 288 second-feet Nov. 5, 1934 (gage height, 2.22 feet).

Remarks.- Records excellent except those for period of ice effect, Dec. 10-14, and for periods of missing gage heights, Dec. 20-22 and Mar. 22-26, which were computed by comparison with records for station at Clough Ranch, and are good. Flow regulated by numerous canal diversions above station and by storage in Jackson Lake.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 3	2,100 1,660 1,540 1,510 1,410	2,470 2,550 2,580 2,800 2,850	2,700 2,890 2,920 2,920 2,920 2,820	2,120 1,990		1111	2,830 3,090 3,480 3,330 3,190	4,580 4,260 4,660 6,440 8,180	9,970 8,730 7,630 7,360 7,840	4,370 4,660 4,500 4,060 4,120	4,020 4,520 3,640 3,370 3,270	2,550 2,560 2,550 2,580 2,510
6 7 8 9 10	1,440 1,560 1,650 1,670 1,620	3,060 3,090 3,190 3,130 3,000	2,450 2,680 2,910 3,230 2,900			- - - -	2,980 3,040 3,000 3,020 2,780	9,830 11,200 11,700 13,100 13,800	7,900 6,700 5,060 4,260 4,660	4,720 5,180 5,610 5,540 5,480	2,870 2,380 1,920 1,780 1,960	2,340 2,320 2,270 2,200 2,120
11 12 13 14 15	1,490 1,550 1,300 1,180 1,170	3,000 3,040 3,020 2,980 2,940	3,050 3,000 2,600 2,500 2,530				2,870 2,980 3,070 3,060 3,170	13,500 13,300 12,200 11,700 12,000	5,270 5,540 7,030 9,010 8,800	4,950 4,020 3,780 4,340 4,550	2,760 2,920 3,040 3,270 3,130	1,840 1,600 1,450 1,160 978
16 17 18 19 20	1,140 1,150 1,270 1,460 1,720	2,920 2,830 2,800 2,780 2,760	2,500 3,000 3,590 3,290 3,250				3,800 4,140 4,140 3,850 3,730	13,000 13,200 12,600 12,600 12,600	7,940 6,700 6,440 7,260 7,630	4,550 4,240 3,590 3,330 3,350	2,980 2,850 2,760 2,780 2,590	954 840 936 1,850 2,030
21 22 23 24 25	1,810 1,930 2,080 2,080 2,160	2,700 2,640 2,630 2,610 2,590	3,000 2,900 2,800 3,070 2,960			3,110 3,000 3,030 3,100 3,200	3,750 4,020 4,260 4,370 4,040	11,700 9,360 7,900 7,530 8,210	8,040 8,520 9,830 10,900 10,400	3,370 3,060 3,420 3,730 4,090	2,330 2,340 2,360 2,530 2,730	1,810 2,020 2,420 2,230 2,230
26 27 28 29 30 31	2,270 2,560 2,390 2,230 2,500 2,480	2,590 2,640 2,590 2,610 2,710	2,890 2,710 2,820 2,850 2,390 2,300			3,050 2,710 2,710 2,710 2,710 2,710	3,750 3,940 4,950 5,540 5,240	9,320 9,930 9,650 10,300 11,700 11,300	8,070 6,340 4,800 4,060 3,780	3,920 3,750 3,460 3,370 3,290 3,350	2,610 2,300 2,060 1,980 2,260 2,400	2,270 2,480 2,340 1,690 1,370

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
Ootober	54,080 84,100 88,420	2,560 3,190 3,590	1,140 2,470 2,300	1,745 2,803 2,852	107,300 166,800 175,400
Calendar year					
January. February March 21-51 May June July August September	32,040 109,410 321,350 216,470 127,950	3,200 5,540 13,800 10,900 5,610 4,520 2,580	2,710 2,780 4,260 3,780 3,060 1,780	2,913 3,647 10,370 7,216 4,127 2,733 1,950	63,550 217,000 637,400 429,400 253,800 168,000
Water year		<u> </u>			

Diversions from Snake River between Shelley and Clough ranch gaging stations, Idaho

Between Shelley and Clough ranch 15 canals divert water from Snake River for irrigation. The two largest canals are equipped with recorders, the others with staff-gages read once daily. Records showing combined discharge of these canals are available for each irrigation season from 1919 to 1937.

Records good.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oot.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
2 3								313	2,690	3,500	2,050	2,100
3						i	i	313 390	2,510 2,530	3,540 3,440	2,0S0 1,960	2,060 1,970
4		١,						461	2,510	3,340	2,120	1,600
5						ĺ		523	2,430	3,220	2,590	1,530
6		\				1	ì	553	2,360	3,550	2,420	1,480
7		1			1			561	2,490	3,500	1,600	1,340
8							l :	618 916	2,780 2,890	3,380 2,660	1,360	1,940 1,990
10								1,080	2,920	2,660	1,430	1,890
11					1	Ì	1	1,220	2,930	2,800	2,300	1,650
12		l .			l	1	İ	1,280	2,880	2,860	2,460	1,500
13		1			ł		l .	1,660	2,940	2,860	2,580	910
14 15								2,250	3,010	2,590	2,620	841
1		·				1	1	2,520	3,200	3,020	2,500	624
16		l ,				ł	l i	2,740	3,330	3,080	2,400	649
17		l			l	l	l i	3,070	3,370	3,130	1,960	658
18] -			1	ł		3,440	3,460	3.090	1,760	802
20		{			Į.	,		3,560	3,540 3,570	3,030	1,710	1,130
								3,720			. 1	
21						1	1	3,680	3,490	3,100	2,090	1,360
25		l .				[1	3,660	3,460	2,700	2,080	1,310
24		ł I			l	l	[3,670 3,780	3,530 3,620	2,800 2,950	2,090	1,410
25								3,880	3,560	2,970	2,160	1,310
26								'			, ,	
27						[3,910 3,900	3,330 3,410	2,940	2,150 1,860	1,290 1,840
28								3,930	3,360	2,900	1.500	1.760
29		·	1			1	1	3.870	3.360	2.850	1,420	1,400
30		1					1	3,650	3,390	2,850	1,820	1,280
31							!	3,190	-	2,740	2,090	- 1

Month	Second- foot-days	Maximum	Kinimun	Mean	Run-off in aore-feet
October November December					
Calendar year					
January. Pobruary Baroth. April Baroth. June June June July Baytes Boptember	72,308 92,840 94,300	3,930 3,620 3,550 2,620 2,100	313 2,360 2,660 1,320 624	2,333 3,095 3,042 2,010 1,396	143,400 184,100 187,000 123,600 83,100
The period					721,200

Snake River at Clough ranch, near Blackfoot, Idaho

Location. - Water-stage recorder, lat. 43°07', long. 112°31', in sec. 31, T. 3 S., R. 34

E., a quarter of a mile below mouth of Blackfoot River and 14 miles southwest of Blackfoot.

Drainage area .- 11,700 square miles.

Records available .- June 1910 to September 1937.

Extremes.— Maximum discharge during year, 12,600 second-feet May 10 (gage height, 7,67 feet); minimum, 160 second-feet Sept. 19 (gage height, 0.70 foot).

1910-37: Maximum discharge, 48,200 second-feet June 18, 1918 (gage height, 14.80 feet); minimum, 111 second-feet Nov. 10, 1934 (gage height, 0.80 foot). Late in summer of 1905 there was practically no flow for a distance of 10 miles in vicinity of Blackfoot. On Aug. 9, 1905, discharge of Snake River just below mouth of Blackfoot River was 39 second-feet.

Remarks. - Records excellent. Discharge for periods of missing gage heights Jan. 7-8, and Aug. 6 interpolated and Nov. 8-12 computed on basis of records at Shelley. Flow regulated by storage in Jackson Lake and Blackfoot-Marsh reservoirs. Numerous irrigation diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oot.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	622	1,660	2,430	1,890	1,870	2,090	2,370	4,480	S,430	412	1,030	296
2	370	1,760	2,150	1,430	1,930	2,130	2,680	3,760	7,250	790	2,270	345
3	245	1,980	2,430	1,320	1,880	2,140	2,900	3,670	6,100	1,020	1,800	434
4	276	2,340	2,250	1,130	1,860	2,150	2,930	4,720	5,370	775	1,270	649
5	340	2,420	2,040	1,110	1,910	2,150	2,520	6,340	5,680	609	835	882
6	434	2,600	2,040	947	1,940	2,100	2,710	8,160	6,230	938	558	528
7	465	2,800	2,300	900	1,940	2,110	2,690	9,900	5,420	1,080	450	719
8	522	2,900	2,790	852	1,940	2,170	2,680	10,500	3,300	1,710	444	492
9	516	2,900	2,920	805	1,840	2,210	2,640	11,500	1,940	2,420	439	260
10	480	2,900	2,640	570	1,830	2,280	2,440	12,400	1,810	2,950	322	190
11	468	2,900	2,800	596	1,800	2,370	2,520	12,400	2,380	2,360	318	238
12	434	2,900	2,760	522	1,810	E,430	2,550	12,100	2,550	1,660	296	245
13	434	2,920	2,380	747	1,800	2,550	2,680	11,200	3,370	998	370	249
14	390	2,950	2,100	775	1,890	2,680	2,630	9,930	5,350	1,050	422	370
15	350	2,930	2,130	1,110	1,940	2,640	2,720	9,540	5,750	1,370	596	276
16	434	2,880	2,300	1,440	2,020	2,660	3,000	9,870	4,800	1,310	616	249
17	492	2,840	2,770	1,600	2,000	2,770	3,440	9,870	3,560	1,130	775	230
18	462	2,800	2,870	1,700	1,940	2,740	3,650	9,140	2,760	684	850	193
19	468	2,770	2,950	1,870	1,810	2,760	3,510	8,630	3,210	345	914	166
20	691	2,720	2,950	1,760	1,840	2,800	3,350	8,850	3,760	223	922	380
21	754	2,690	2,920	1,660	1,860	2,770	3,300	8,510	4,340	172	450	516
22	835	2,610	2,770	1,630	1,810	2,770	3,450	6,700	4,560	166	238	558
25	964	2,540	2,690	1,500	1,780	2,660	3,670	4,890	5,440	163	234	882
24	1,050	2,460	2,740	1,320	1,760	2,690	3,960	3,940	6,470	181	256	684
25	1,100	2,490	2,710	1,160	1,860	2,760	3,810	3,900	7,080	486	340	670
26 27 28 29 30 31	1,240 1,450 1,530 1,370 1,490 1,640	2,500 2,560 2,560 2,550 2,490	2,540 2,740 2,690 2,520 2,220 2,220	1,260 1,510 1,720 1,820 1,860 1,860	1,940 2,050 2,060 - -	2,920 2,800 2,520 2,460 2,430 2,370	3,450 3,420 4,070 5,100 5,040	4,890 5,990 5,970 5,920 7,390 8,790	5,970 3,600 2,340 1,040 602	740 596 516 345 332 462	439 350 375 340 304 322	805 622 570 516 276

Cotober Coto						
November 78,520 2,950 1,660 2,611 155,56 December 78,820 2,950 2,040 2,643 156,36 Calendar year 1936 1,489,474 25,000 187 4,070 2,954,00 January 40,374 1,990 522 1,302 80,00 February 52,910 2,060 1,760 1,390 104,90 March 77,080 2,920 2,090 2,486 152,90 2,490 2,486 152,90 2,970 3,206 190,80	Month		Maximum	Minimum	Mean	Run-off in
January 40,874 1,890 522 1,302 80,06 February 52,910 2,060 1,760 1,890 104,90 March 77,080 2,920 2,990 2,486 152,90 April 96,180 5,100 2,370 3,206 190,88 May 245,880 12,400 3,670 7,866 483,70 June 150,462 3,450 602 4,339 286,30 July 27,993 2,950 163 903 55,53 August 19,145 2,270 234 618 37,97 September 13,790 882 166 460 27,35	November	78,320	2,950	1,660	2,611	44,270 155,300 156,300
February 52,910 2,060 1,760 1,890 104,90 March 77,080 2,920 2,486 152,99 April 96,180 5,100 2,370 3,206 190,88 May 243,650 12,400 3,670 7,866 485,70 June 130,462 8,430 602 4,349 258,80 July 27,993 2,950 163 903 55,55 August 19,145 2,270 234 618 37,97 September 13,790 882 166 460 27,35	Calendar year 1936	1,489,474	25,000	187	4,070	2,954,000
Water year 1936-37 881,245 12,400 163 2,414 1,748,00	February Harch April Hay June July August	52,910 77,080 96,180 243,850 130,462 27,993 19,145	2,060 2,920 5,100 12,400 8,430 2,950 2,270	1,760 2,090 2,370 3,670 602 163 234	1,890 2,486 3,206 7,866 4,349 903 618	80,080 104,900 152,900 190,800 483,700 258,800 55,520 37,970 27,350
	Water year 1936-37	881,245	12,400	163	2,414	1,748,000

American Falls Reservoir at American Falls, Idaho

Location.- Water-stage recorder, lat. 42°46', long. 112°53', in sec. 30, T. 7 S., R. 31 E., at outlet gates of reservoir at American Falls.

Records available. - March 1926 to September 1937.

Remarks.- American Falls Reservoir impounds water for supplemental irrigation of lands under IFTE gation by various canals diverting from Snake River at Minidoka and Milner Dams. It has a capacity of 1,700,000 acre-feet between elevations 4,295,70 and 4,354,50 feet respectively, above mean sea level. Gage-height record and capacity table furnished by Bureau of Reclamation.

							20000
	Sept.	562,560 550,290 538,550 527,100 516,240	507,690 498,860 489,130 481,930 475,300	468,940 463,020 456,550 451,170 445,510	433,650 433,610 428,610 420,990 415,230	409,850 405,490 401,640 404,720 405,230	406,260 407,030 408,050 408,050 411,900
	Aug.	1,025,590 1,013,140 1,002,840 990,830 978,940	961,830 945,560 929,670 912,680 895,080	880,970 865,280 848,420 830,890 816,620	802,540 786,970 768,580 752,350	727,400 710,340 692,920 678,330 663,060	647,480 632,340 614,980 604,040 589,660 576,490
	July	1,514,980 1,496,030 1,482,940 1,468,280 1,453,160	1,424,370 1,406,880 1,396,770 1,388,700	1,379,120 1,367,010 1,348,970 1,334,120 1,319,760	1,304,440 1,290,800 1,274,730 1,257,680 1,240,880	1,219,300 1,200,740 1,183,320 1,166,840 1,143,680	1,131,230 1,115,110 1,097,070 1,079,040 1,058,140
1937	June	1,670,320 1,675,340 1,673,100 1,677,580 1,673,100	1,674,220 1,675,900 1,675,100 1,665,340 1,656,500	1,646,550 1,636,040 1,633,830 1,629,410 1,624,430	1,618,350 1,613,440 1,605,290 1,596,590 1,590,620	1,586,270 1,581,920 1,573,770 1,571,660 1,571,050	1,568,880 1,565,080 1,558,630 1,545,320 1,530,420
6 to September 1937	Мау	1,722,020 1,719,170 1,714,610 1,710,080	1,714,610 1,719,740 1,722,020 1,720,880 1,715,180	1,711,760 1,715,750 1,714,040 1,705,040	1,708,960 1,711,200 1,710,080 1,710,640 1,708,960	1,711,200 1,706,720 1,698,880 1,691,590 1,682,060	1,673,660 1,668.660 1,662.020 1,654,290 1,655,390 1,655,390
in acre-feet, water year October 1936	Apr.	1,712,330 1,710,080 1,712,900 1,713,470	1,712,900 1,717,460 1,715,750 1,710,080 1,710,080	1,703,920 1,710,080 1,708,960 1,711,200	1,711,200 1,715,180 1,717,460 1,716,890	1,716,320 1,719,740 1,718,030 1,716,890 1,716,900	1,710,080 1,706,720 1,706,720 1,717,460 1,721,450
water year	Mar.	1,498,120 1,504,410 1,513,910 1,523,490 1,532,010	1,541,060 1,549,580 1,557,570 1,566,160 1,574,310	1,582,470 1,591,160 1,599,850 1,608,550 1,620,010	1,628,860 1,638,810, 1,648,760 1,658,710 1,666,450	1,675,340 1,684,310 1,689,910 1,698,880 1,705,600	1,708,960 1,713,470 1,713,470 1,713,470 1,711,760
acre-feet,	Feb.	1,295,670 1,300,540 1,306,890 1,316,300 1,324,220	1,334,120 1,342,530 1,349,960 1,357,430 1,363,990	1,370,540 1,376,590 1,384,660 1,392,730 1,400,300	1,407,400 1,416,140 1,421,280 1,428,990 1,435,680	1,443,390 1,449,050 1,455,730 1,463,570 1,470,370	1,482,940 1,490,270
Contents, in	Jan.	1,154,280 1,160,280 1,166,840 1,173,900	1,183,790 1,188,030 1,192,270 1,196,980	1,204,510 1,206,870 1,207,810 1,208,280 1,210,190	1,208,750 1,211,630 1,216,900 1,217,860	1,225,060 1,235,330 1,235,610 1,240,400 1,247,120	1,251,910 1,257,680 1,263,530 1,270,350 1,278,620 1,286,900
ט	Dec.	907,430 913,900 923,600 930,480 934,930	939,370 946,390 952,230 961,410 970,590	979,360 986,530 993,830 1,000,700	1,014,860 1,020,440 1,032,170 1,043,180 1,061,980	1,060,790 1,070,030 1,079,490 1,088,060 1,096,170	1,106,990 1,116,020 1,120,630 1,128,470 1,138,610
	Nov.	692,240 702,490 709,320 717,570	734,070 742,840 753,070 764,250 774,350	783,720 793,640 803,650 813,280 822,180	829,750 832,410 844,230 850,710 857,190	863,320 868,420 873,120 877,830	886,850 891,560 896,260 900,180
	Oct.	608,100 609,040 609,980 609,670 611,540	613,100 614,350 615,920 618,160 620,740	622,670 623,640 625,570 626,860 631,050	632,340 633,310 635,240 638,140 639,750	642,970 645,230 648,450 652,430 657,410	661,730 668,040 672,690 678,660 684,380 689,170
	Day		100846	11 12 14 15	119 119 119 119	22222 2222 2422 2422	338848

SNAKE RIVER MAIN STEM

Snake River at Neeley, Idaho

Location.- Water-stage recorder, lat. 42°45', long. 112°54', in sec. 31, T. 7 S., R. 31 E., about 1 mile below American Falls Dam. Discharge measurements are made in sec. 11, T. 8 S., R. 30 E., half a mile north of Neeley and 3 miles downstream from recorder. The following records show flow at latter point.

Records available .- March 1906 to September 1937.

Extremes.- Maximum discharge during year, 15,800 second-feet May 9-10 (gage height, 6.70 feet); minimum, 185 second-feet Mar. 5 (gage height 0.88 foot).

1906-37: Maximum discharge, 48,400 second-feet June 20, 1918 (gage height, 13.5 feet, at former site, 3 miles downstream); minimum, 124 second-feet several days during November and December 1932 (gage height, 0.50 foot).

Remarks.- Records excellent. Flow regulated by operation of gates at American Falls Dam.

About 700,000 acres of land irrigated by diversion from river and its tributaries above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dea.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.
1	2,380	1,190	2,020	1,280	1,200	1,020	4,980	8,200	8,200	11,600	11,100	9,630
2	2,430	1,170	1,100	1,250	1,100	633	5,060	8,610	8,490	11,500	10,700	9,290
3	2,460	1,190	1,090	1,240	1,050	350	5,030	8,570	8,670	11,200	10,400	8,870
4	2,480	1,170	1,350	1,300	702	250	5,070	8,200	8,820	10,800	10,200	8,780
5	2,490	580	1,640	1,260	418	312	5,090	6,900	7,950	11,000	10,200	8,530
6 7 8 9	2,470 2,280 2,210 2,160 2,210	610 448 302 302 606	1,630 1,610 1,630 1,630	1,220 1,210 1,210 1,210 1,210	524 710 994 1,210 1,210	325 586 742 890 900	5,110 5,100 7,580 6,600 4,930	7,870 9,290 12,400 15,800	7,580 8,320 9,330 9,680 9,460	11,900 12,200 11,900 11,200 10,900	11,000 11,400 11,500 11,500 11,500	8,200 7,790 7,460 7,100 6,860
11	2,230	613	1,600	1,210	1,210	900	5,090	15,700	9,080	10,900	11,400	6,430
12	2,250	614	1,600	1,970	837	900	5,060	15,700	9,080	11,700	11,300	5,970
13	2,250	595	1,630	3,900	572	804	5,070	15,600	9,030	12,100	11,200	5,740
14	2,250	955	1,520	3,350	593	678	5,090	15,100	9,200	11,800	11,100	5,740
15	2,250	1,550	1,140	3,940	710	686	5,060	11,700	9,680	11,100	11,100	5,740
16	2,220	1,550	912	3,980	870	686	5,050	11,000	10,000	11,000	11,100	5,740
17	2,220	2,240	674	1,170	870	694	5,110	11,000	9,980	10,900	11,100	5,710
18	2,000	2,340	680	3,930	870	930	5,160	11,300	9,980	11,700	11,500	5,710
19	1,990	2,350	668	4,210	860	1,160	5,230	11,700	9,500	12,100	11,400	5,710
20	2,010	2,340	780	2,330	8 7 0	1,130	5,420	11,700	9,200	12,400	11,300	5,560
21	1,990	2,350	810	1,720	890	1,110	5,390	11,700	8,910	12,400	11,200	6,010
22	1,990	2,840	810	1,620	870	1,660	5,750	11,600	9,160	11,900	11,200	4,360
23	1,830	2,840	826	1,150	686	2,230	6,420	11,600	9,760	11,500	11,000	3,710
24	1,410	2,820	818	1,170	686	1,810	8,360	11,300	10,200	11,500	10,900	2,700
25	1,320	2,800	250	1,200	870	2,640	8,360	10,700	10,300	11,700	10,600	2,570
26 27 28 29 30 31	1,330 1,310 1,320 1,180 1,140 1,180	2,780 2,770 2,830 2,850 2,850	1,420 1,430 811 820 820 1,170	1,210 1,120 1,030 726 755 903	880 880 880	3,630 4,890 5,490 5,980 5,480 5,180	7,300 4,980 5,010 5,880 7,620	10,600 10,700 10,700 10,800 10,000 8,570	9,800 9,590 9,890 10,600 11,500	12,000 11,900 11,900 11,900 12,100 11,900	10,300 10,300 10,400 10,300 9,980 9,720	2,570 2,590 2,560 1,960 1,860

Month	Second- foot-days	Maximum	Minimm	Mean	Run-off in acre-feet
October November December	61,210 50,745 36,519	2,490 2,850 2,020	1,140 302 250	1,975 1,692 1,178	121,400 100,700 72,430
Calendar year 1936	2,087,882	28,400	144	5,705	4,141,000
January. Pebruary. March. April. May. June. July. August. September.	54,984 24,102 54,676 170,960 350,410 281,140 360,600 337,900 171,450	4,210 1,210 5,980 8,360 15,800 11,500 12,400 11,500 9,630	726 418 250 4,930 6,900 7,580 10,800 9,720 1,860	1,774 861 1,764 5,699 11,300 9,371 11,630 10,900 5,715	
Water year 1936-37	1,954,696	15,800	250	5,355	3,877,000

Lake Walcott near Minidoka, Idaho

Location. Hook gage, lat. $42^{\circ}40^{\circ}$, long. $113^{\circ}29^{\circ}$, in sec. 1, T. 9 S., R. 25 E., in backwater formed by Minidoka Dam, 6 miles southeast of Minidoka. Zero of gage is 4,150.48 feet above mean sea level.

Records available .- April 1909 to September 1937.

Remarks.- Lake Walcott floods 11,900 acres at gage height 45.13 feet and impounds 96,700 acre-feet between gage heights 36 and 45.13 feet for irrigation of lands on Minidoka project of Bureau of Reclamation. Considerable water is stored below gage height 36 feet but cannot be withdrawn for irrigation through canals that divert from the lake. Gage-height record and capacity table furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47,360	25,730	50,740	61,060	62,270	62,160	60,530	96,870	95,550	95,910	95,550	95,180
2	46,090	26,340	49,790	61,610	62,490	62,380	67,870	96,750	95,430	95,550	95,670	96,510
3	44,820	26,140	50,520	61,830	62,490	62,160	69,190	96,870	94,600	97,110	95,430	96,870
4	43,870	25,730	50,520	61,940	62,380	61,720	69,850	96,390	95,910	96,990	95,070	96,990
5	42,390	25,230	51,490	62,600	62,160	61,280	69,850	94,020	95,550	95,430	94,250	95,910
6	42,070	24,310	52,680	63,040	61,500	60,740	71,390	94,140	94,950	94,950	93,320	95,430
7	41,440	22,590	53,860	63,480	61,720	60,420	75,650	94,840	94,490	95,430	93,320	94,840
8	40,380	21,670	54,400	63,590	61,940	60,420	83,430	95,180	94,950	96,390	94,140	93,900
9	39,550	21,170	55,900	63,700	62,380	60,420	89,360	96,870	94,950	97,110	94,020	92,390
10	38,920	19,440	56,980	63,810	62,600	60,420	89,360	96,630	95,180	97,110	94,600	90,880
11	38,300	18,050	58,480	63,480	62,820	60,420	87,500	96,510	94,140	96,150	95,430	89,360
12	37,260	16,470	60,100	62,820	62,930	60,530	90,290	96,630	93,900	95,310	95,670	86,920
13	36,640	14,090	50,850	62,600	62,270	60,960	91,690	96,390	95,070	95,430	95,670	85,400
14	36,020	13,300	61,500	61,720	61,940	60,850	92,860	94,720	94,490	96,030	95,670	83,540
15	36,230	11,620	62,050	61,500	61,720	60,630	93,090	95,910	94,720	95,910	95,430	81,510
16	35,290	12,110	61,610	61,940	61,940	60,630	92,970	95,430	94,490	94,950	95,670	79,260
17	34,360	12,310	61,720	61,280	62,050	60,420	94,020	95,670	94,950	94,490	95,180	77,230
18	33,740	13,890	61,500	59,990	62,160	60,100	94,600	95,070	94,720	94,490	94,250	75,200
19	32,910	15,280	61,500	62,270	62,380	60,850	92,860	95,670	95,550	94,250	94,720	72,940
20	32,080	13,960	61,500	62,270	62,490	61,280	94,140	95,670	95:180	95,430	94,950	72,050
21	31,460	19,040	61,500	62,380	62,380	61,830	93,790	96,150	95,910	96,150	94,950	71,390
22	30,630	21,670	61,500	63,040	62,380	61,940	94,840	95,180	95,310	96,630	94,720	69,850
23	30,420	24,920	61,060	62,600	62,490	62,380	93,550	95,910	94,840	96,270	94,250	66,000
24	30,420	28,580	60,630	62,600	62,160	62,600	96,630	96,030	94,950	96,150	94,720	64,360
25	30,210	31,870	59,770	62,820	62,050	61,000	96,390	95,790	95,670	95,430	95,180	61,720
26 27 28 29 30 31	29,590 29,590 29,180 28,680 29,070 27,260	35,400 38,510 41,860 45,140 47,570	58,480 59,340 60,200 60,310 60,630 60,420	62,820 62,490 62,160 62,490 62,160 62,160	62,160 62,160 62,160	61,280 63,260 65,890 66,880 67,650 68,310	95,910 91,690 90,530 92,620 95,430	95,670 95,670 94,950 94,250 96,150 95,430	95,670 95,430 95,310 94,720 95,180	95,180 94,720 94,490 94,490 94,720 95,550	94,950 94,370 93,670 93,670 94,490 94,370	59,450 57,190 55,470 52,250 50,520

Snake River near Minidoka, Idaho

Location. - Water-stage recorder, lat. 42°40', long. 113°30', in sec. 2, T. 9 S., R. 25 E., I mile below Minidoka Dam and 6 miles southeast of Minidoka.

Records available.- April 1910 to September 1937. August 1895 to December 1899 and May $\overline{1901}$ to December 1910, at Montgomery Ferry, 6 miles downstream.

Extreme. - Maximum discharge during year, 13,600 second-feet May 12 (gage height, 9.01 feet); minimum, 59 second-feet Nov. 18 (gage height 1.56 feet).
1910-37: Maximum discharge, 45,900 second-feet June 21, 1918 (gage height, 16.02 feet); minimum, that of Nov. 18, 1936.

Remarks.- Records excellent except those for periods of ice effect Jan. 6-29, Feb. 5-23, Which are based on Minidoka power-plant records and are good. Flow regulated by storage at American Falls and Lake Walcott reservoirs and by diversions 1 mile upstream for irrigation in Minidoka project.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 5 4 5	2,150 2,140 2,150 2,140 2,150	1,160 1,080 1,080 1,010 1,040	1,010 1,020 676 728 753	1,050 1,250 1,270 1,090 1,100	1,220 1,260 1,320 1,290 1,200	1,080 1,080 922 768 628	4,72 4,93 4,93 5,05 4,30	7,460 7,320 7,540	7,010 7,320 7,400	8,120 7,940 7,830 7,880 8,120	8,720 8,460 8,260 8,090 8,170	6,500 6,500 6,500
6 7 8 9 10	2,110 1,980 1,890 1,880 1,790	986 1,050 255 520 1,080	711 855 877 836 866	1,030 1,200 1,220 1,200 1,240	820 750 760 1,160 1,210	792 778 991 1,080 1,100	3,66 3,60 3,76 4,61 4,74	0 6,900 0 8,870 0 12,700	6,390 7,070 7,540	8,610 8,750 8,140 7,880 8,090	8,380 8,520 8,440 8,380 8,410	6,080 5,830 5,760
11 12 13 14 15	1,720 1,720 1,720 1,730 1,800	1,000 1,480 1,460 1,160 1,010	883 1,000 1,340 1,260 1,360	1,350 2,110 3,110 3,250 2,950	1,260 1,300 1,150 1,020 800	1,090 1,010 1,040 1,040 1,000	4,63 4,39 4,02 4,34 4,43	0 13,400 0 13,100 0 12,400	6,900 7,070 6,950	8,230 8,610 e,810 8,700 8,700	8,380 8,350 8,320 e,260 8,230	5,170 5,050 5,050
16 17 18 19 20	1,900 1,920 1,920 1,920 1,930	1,000 1,230 1,230 1,290 830	1,160 994 789 774 887	3,470 3,170 1,950 3,050 3,020	900 930 990 980 1,010	1,010 996 1,070 1,030 1,120	4,59 4,72 4,93 4,56 4,88	0 e,320 0 8,200 0 8,670	7,120 6,930 6,840	8,460 8,410 8,670 8,750 8,780	8,260 8,290 8,410 8,460 8,350	5,340 5,340 5,390
21 22 23 24 25	1,920 1,780 1,590 1,400 1,110	891 903 815 804 820	932 1,000 1,160 1,270 1,320	950 1,860 1,120 1,050 1,100	1,020 1,020 1,020 1,020 1,030	1,200 1,300 2,080 2,540 2,740	4,01 5,12 5,32 8,03 7,97	0 8,720 0 8,750 0 8,580	6,290 6,950 7,320	8,870 8,990 8,720 8,640 8,670	8,380 8,260 8,230 8,060 7,830	4,740 4,610 3,580
26 27 28 29 50 51	1,110 1,150 1,400 1,110 1,130 1,100	826 831 832 838 1,010	1,150 1,100 943 959 958 1,000	1,380 1,320 1,030 890 850 1,100	1,070 1,080 1,090	2,760 3,230 4,370 4,910 4,930 4,960	7,77 5,96 4,50 4,48 5,96	0 7,880 0 7,830 0 7,830	6,950 7,320 7,510 8,000	8,780 8,780 8,580 8,520 8,640 8,720	7,740 7,710 7,630 7,570 7,290 6,950	2,760 2,840 2,360 2,120
		N	ionth			Second foot-da		lex1mm	Minimum	Mea		m-off in

Nonth	Second- foot-days	Meximum	Minimum	Mean	Run-off in acre-feet
October	53,460 29,521 30,571	2,150 1,480 1,360		1,725 984 986	58,550
Calendar year 1936	1,686,210	26,500	165	4,607	3,345,000
January. Pebruary. March. April May Jun Jun Jun Jun September.	51,730 29,700 54,645 149,710 277,330 210,410 263,390 252,790 148,850	3,470 1,320 4,960 8,030 13,400 8,000 8,990 8,720 6,630	750 628 3,600 6,060 6,210	1,669 1,061 1,763 4,990 8,946 7,014 8,496 8,155 4,962	296,900 550,100 417,300
Water year 1936-37	1,552,107	13,400	255	4,252	3,078,000

Snake River at Milner, Idaho

Location. Water-stage recorder, lat. $42^{\circ}32^{\circ}$, long. $114^{\circ}01^{\circ}$ in sec. 29, T. 10 S., R. 21 E., a quarter of a mile below Milner Dam, at Milner.

Records available .- May 1909 to September 1937.

Extremes. - Maximum discharge during year, 8,560 second-feet May 10 (gage height 10.92 feet); minimum, 7 second-feet June 24, 29-30, July 11-12 (minimum gage height, 1.40 feet June 24, 29-30).

1909-1937: Maximum discharge, 44,400 second-feet June 12, 1909 (gage height, 20.10 feet, on old gage); minimum, 2 second-feet March 17-28, 1936 (gage height 1.18 feet).

20,10

Remarks.- Records good. Discharge for period of ice effect, Jan. 22-25, computed from re-cords of flow over dam. Flow regulated by operation of American Falis and Lake Walcott reservoirs and by diversions for irrigation at Milner Dam, just above station. Station is below all irrigation diversions from upper Snake River. Flow includes some stored water used downstream by Idaho Power Co.

Rating table. water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 16 to Sept. 30)

1.3	-	~ 0			3 3 7 0
	ð	3.0	167	5.5	1,130
1.6	16	3.5	270	6.0	1,540
1.9	28	4.0	407	7.0	2,540
2.2	46	4.5	610	9,0	4.540
2.6	99	5.0	848	11.0	6,650

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	299 301 301 301 301	293 299 299 301 301	291 278 278 278 278 280	280 280 280 283 296	436 420 404 387 378	378 378 375 378 378	4,240 3,890 4,590 4,190 4,100	3,240 3,940 2,890 2,740 1,130	25 24 22 450 32	8 9 9 9	202 200 196 196 198	200 200 198 196 198
6 7 8 9 10	301 301 299 299 299	299 301 301 299 301	283 283 283 283 283 283	339 342 345 347 345	384 372 367 372 375	372 372 375 375 375	2,740 2,740 1,940 2,640 3,650	518 296 814 5,190 5,450	24 20 13 12 15	8 10 1e 12 8	198 202 202 202 198	200 2 00 2 0 0 200 200 200
11 12 13 14 15	301 301 301 299 299	299 301 301 301 299	283 278 275 280 283	372 737 1,870 2,580 2,920	378 384 375 378 375	378 378 375 375 375	2,940 3,440 2,680 2,480 2,700	5,350 5,860 5,450 4,590 3,220	15 12 12 13 13	7 7 8 7 2 26 8	202 202 202 202 202 202	200 20 0 200 200 200 200
16 17 18 19 20	301 304 299 299 296	296 296 301 301 301	283 280 278 278 278 278	2,760 2,890 2,600 2,100 2,700	372 372 378 378 378	372 375 361 372 370	2,560 3,160 3,160 2,560 2,640	541 315 286 288 740	13 13 13 16 19	193 198 198 196 196	202 202 202 202 202	204 206 204 204 204
21 22 23 24 25	299 301 299 301 301	301 299 299 296 301	278 275 283 286 286	1,660 430 430 430 430	375 375 375 3 7 5 3 7 5	381 372 640 2,330 2,010	2,540 2,590 1,840 4,740 4,790	1,300 784 642 808 76	23 14 10 7 9	196 196 198 198 198	202 202 202 202 202	204 2 14 268 263 268
26 27 28 29 30 31	299 301 301 301 299 299	301 299 299 301 299	280 278 280 280 278 278	433 475 610 456 401 420	375 375 378 - -	1,980 2,050 2,660 3,520 3,820 3,820	4,040 2,640 702 1,500 2,970	23 14 13 12 781 1,500	10 9 8 7 7	198 202 202 206 212 202	202 200 198 200 200 200	263 263 263 263 263
H		Seconda Run-off			n-off in							

Month	Second- foot-days	Meximum	Minimum	Mean	Run-off in acre-feet
October	9,303 8,985 8,698	304 301 291	296 293 275	300 300 281	18,450 17,820 17,250
Calendar year 1936	386,957	19,600	2	1,157	767,500
January. February Barch April Bay June June July August September	10,666 31,064 91,392 58,811 880	2,920 436 3,820 4,790 5,860 450 268 202 268	280 367 361 702 12 7 7 196 198	996 381 1,002 3,046 1,897 29.3 118 201 218	61,210 21,160 61,610 181,300 116,600 7,240 12,350 12,990
Water year 1936-37	267,085	5,860	7	732	529,700

Snake River near Kimberly, Idaho

Location.- Water-stage recorder, lat. 42°36', long. 114°22', in SEl sec. 32, T. 9 S., R. 18 E., half a mile below Twin Falls, 2½ miles above Shoshone Falls, and 4 miles north of Kimberly.

Records available .- July 1923 to September 1937.

Average discharge. - 14 years, 2,340 second-feet.

Extremes. - Maximum discharge during year, 7,090 second-feet May 10, 11 (gage height, 9.37 feet); minimum, undetermined leakage of Twin Falls power plant. 1923-37: Maximum discharge, 27,200 second-feet July 4,1927 (gage height, 14.76 feet); minimum, undetermined leakage of Twin Falls power plant, at times since Nov. 23, 1935.

Remarks.- Records good except those for periods of missing or incomplete gage-height record, Oct. 1-28, Nov. 11-16, Dec. 11-15, Jan. 8-29, Mar. 9-20, Sept. 21-30 (based on records for Mi.ner and Twin Falls gaging stations) and those for Dec. 4-6, 9, 10, 16, 24, 25, Jan. 1-5, June 10, July 16, Aug. 2-5, 15, 16, 21, 30, Sept. 7, 11, 17, 18 (based upon partial gage-height record) and are fair. Practically entire flow during irrigation season is diverted at Milner; no diversions between Milner and Kimberly. Regulation by operation of Twin Falls power plant, half a mile upstreams.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5		684 704 664 693 690	634 645 641 613 631	622 633 619 609 596	736 771 801 748 760	708 715 687 698 686	4,880 4,560 5,210 4,720 4,560	3,560 4,560 3,690 3,180 2,020	1,020 519 362 571 713	399 411 406 206 378	573 582 555 554 574	658 630 634 609 602
6 7 8 9 10		692 715 634 665 665	563 706 646 623 634	607 622	718 722 684 700 686	680 691 671	3,300 2,830 2,430 2,080 4,260	1,340 650 575 4,230 5,730	406 458 370 319 393	388 395 403 391 382	584 612 545 589 579	680 606 642 641 663
11 12 13 14 15	750	670	630		692 685 724 575 710	680	3,180 3,830 3,060 2,620 2,940	5,910 6,290 6,100 5,040 4,260	392 389 390 388 408	356 407 403 463 486	591 602 571 572 570	614 620 620 607 620
16 17 18 19 20		674 680 671 662	609 625 641 640 659	2,850	710 775 720 705 703		2,830 3,430 3,690 2,940 2,520	1,560 915 659 533 680	401 392 388 390 395	544 554 465 543 547	556 574 573 574 566	628 630 585 595 693
21 22 23 24 25		683 666 670 655 652	636 640 636 601 618	780	662 679 716 703 699	687 633 656 1,820 2,200	3,300 2,200 2,720 4,400 5,550	1,560 1,340 995 1,250 915	412 395 410 393 38 7	545 556 543 551 555	565 586 584 605 589	675
26 27 28 29 50 31	717 714 711	662 667 664 655 653	636 630 634 626 62 2 651	880 692	706 705 696 - -	2,080 2,140 2,350 4,110 4,560 4.560	4,720 3,690 1,660 1,120 3,060	507 381 385 385 449 1,040	383 355 376 367 402	567 530 543 561 594 586	608 625 631 607 605 617	575

Month	Second- foot-days	Meximum	Minimum	Mean	Run-off in acre-feet
October	23,142 20,170 19,590	- 715 706	711 563	747 672 632	45,900 40,010 38,860
Calendar year 1936	536,177	21,000	-	1,465	1,063,000
January Pebruary March April Hay Jun Jun July August September.	41,270 19,891 39,492 102,290 70,689 12,944 14,658 18,118 19,327	801 4,560 5,550 6,290 1,020 594 631 693	596 575 - 1,120 381 319 206 545 585	1,331 710 1,274 3,410 2,280 431 473 584 644	81,860 39,450 78,330 202,900 140,200 25,670 29,070 35,940 38,330
Water year 1936-37	401,581	6,290	206	1,100	796,500

Snake River near Twin Falls, Idaho

Location. - Water-stage recorder, lat. 42°36', long. 114°29', in SW\{\frac{1}{2}}SW\{\frac{1}{

Records available .- September 1911 to June 1917, May 1919 to September 1937.

Average discharge. - 23 years (1911-16, 1919-37), 4,030 second-feet.

Extremes. - Maximum discharge during year, 7,640 second-feet May 11 (gage height, 6.72 feet); minimum 335 second-feet (estimated) July 5 (gage height, 1.85 feet), 1911-17, 1919-37: Maximum discharge, 32,200 second-feet June 10, 1914 (gage height, 13.3 feet); minimum 250 second-feet (estimated) Apr. 16, 1936.

Remarks.- Records good. Discharge for periods of missing or partial gage-height record, Oct. 29 to Nov. 15, Dec. 13-17, Jan. 3-30, July 13, 16-31, computed on basis of records for station at Milner. No diversion except by small ranch ditches between this station and the one at Milner, where practically the entire flow is diverted during irrigation season.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	952 995 995 952 995	945 940 940 935 935	870 870 830 830 870	S30 792 830 S30 840	530 870 952 952 910	830 870 870 830 830	5,460 5,260 5,790 5,360 5,260	3,860 5,040 4,240 3,410 2,660	1,500 952 652 620 830	505 505 532 480 390	830 830 830 792 755	830 910 910 910 792
6 7 8 9 10	995 952 995 952 952	935 930 930 925 925	720 870 952 910 830	875	952 910 870 830 830	830 830 830 830 830	4,150 3,070 2,900 2,140 4,640	1,560 1,080 720 3,820 6,230	720 620 620 590 532	455 480 505 532 532	755 830 830 830 830	995 870 910 870 910
11 12 13 14 15	952 952 995 995 952	920 920 915 915 910	830 792 830 830 830		830 830 830 830 755	830 830 830 792 792	3,680 4,150 3,590 2,900 3,320	6,690 6,690 6,690 5,570 4,980	532 560 560 560 560	505 532 540 560 685	792 792 870 830 830	870 830 870 830 870
16 17 18 19 20	792 1,080 1,040 1,040 995	910 910 910 910 910	830 830 830 830 830	3,000	870 870 995 870 830	792 830 830 830 830	3,240 3,590 4,240 3,410 2,900	2,140 1,130 995 685 685	560 560 560 590 532	750	830 792 830 830 830	870 870 870 755 952
21 22 23 24 25	995 995 952 910 952	910 910 910 910 910	830 830 830 830 792		830 870 870 870 870	830 830 830 1,540 2,500	4,060 2,280 3,410 4,460 6,230	1,280 1,560 1,340 1,180 1,340	560 560 560 560 532		830 830 830 830 830	870 870 952 952 952
26 27 28 29 30 31	952 952 952 950 950 945	830 830 910 910 910	792 870 830 830 830 830	950	830 830 830 - -	2,360 2,360 2,580 4,440 4,940 5,040	5,360 4,440 2,210 1,280 3,240	870 532 505 505 560 995	505 480 480 480 480	800	830 830 870 870 870 870	870 870 952 952 952

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	30,033 27,410 25,908	1,080 945 952	792 8 3 0 720	969 914 836	59,570 54,370 51,390
Calendar year 1936	616,617	21,200	311	1,685	1,223,000
Jamary February March April Har Jun Jun July August September	46,749 24,216 44,816 116,020 79,542 18,407 20,288 25,628 26,686	995 5,040 6,230 6,690 1,500 870 995	792 755 792 1,280 505 480 390 755 755	1,508 565 1,446 3,567 2,566 614 654 827 890	92,730 48,030 88,890 230,100 157,800 36,510 40,240 50,830 52,930
Water year 1936-37	485,703	6,690	390	1,331	963,400

Snake River near Hagerman, Idaho

Location.- Water-stage recorder, lat. 42°46', long. 114°53', in NW½ sec. 1, T. 8 S., R. 13 E., just above Upper Salmon Falls, an eighth of a mile above Owsley bridge, and 4 miles south of Hagerman. Big Wood River enters 11 miles downstream. Zero of gage is 2,873.46 feet above mean sea level.

Records available .- August 1912 to June 1917; July 1919 to September 1937.

Average discharge. - 21 years (1912-15, 1919-37), 8,180 second-feet.

Extremes.- Maximum discharge during year, 11,500 second-feet May 11; maximum gage height, 6.39 feet Jan. 16; minimum discharge, 4,680 second-feet July 2, 3, 5-7; minimum gage height, 3.75 feet several times during period Aug. 13-20.

1912-17, 1919-37: Maximum discharge, 35,100 second-feet June 10, 1914 (gage height, 7.75 feet); minimum, 4,030 second-feet July 15 to Aug. 2, 1915 (gage height, 3.1 feet). Data in 1916 and 1917 insufficient for determination of maximum and minimum discharge.

Remarks.- Records good. Because of missing or incomplete gage heights Jan. 19, 20, 22, Apr. 3-10, May 24, 27, 28, June 7-11, and changes due to work at upper Salmon Falls power plant Feb. 19-21, Aug. 10, Sept. 4-24, discharge computed on basis of records for King Hill stations on Snake River. Discharge for Jan. 7, 8, 11, 12, 31, Feb. 1, 16, June 4 interpolated. Practically entire flow at Milner diverted during irrigation season; only minor diversions below Milner.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.
1	6,490	6,050	6,080	5,950	5,860	6,080	9,800	8,350	6,250	4,850	5,720	5,900
2	6,350	6,080	6,080	. 5,950	5,820	6,080	10,400	5,850	5,900	4,650	5,720	5,900
5	6,350	6,050	6,080	5,950	5,820	6,080	10,000	9,240	5,550	4,650	5,720	6,080
4	6,350	6,210	6,080	5,950	5,950	5,900	10,200	5,000	5,550	4,850	5,720	6,100
5	6,350	6,210	5,950	6,080	5,950	5,900	9,500	7,820	5,550	4,650	5,550	6,100
6	6,350	6,210	6,080	6,210	5,820	5,900	9,250	6,420	5,550	4,680	5,550	6,100
7	6,350	6,210	6,210	6.120	5,820	5,900	8,000	5,720	5,500	4,680	5,550	6,150
8	6,350	6,210	6,350	6,040	5,820	5,900	7,750	5,200	5,450	4,850	5,550	6,150
9	6,350	6,210	6,210	5,950	5,820	5,900	7,250	5,380	5,400	4,950	5,380	6,150
10	6,210	6,210	6,080	5,950	5,820	5,900	7,250	10,600	5,300	4,850	5,550	6,200
11	6,210	6,080	6,080	5,990	5,710	5,900	8,880	10,900	5,250	4,850	5,720	6,200
12	6,210	6,080	5,950	6,040	5,710	5,900	8,520	10,700	5,200	4,850	5,720	6,200
15	6,210	6,080	5,950	6,080	5,710	5,720	8,700	10,900	5,200	4,850	5,720	6,250
14	6,350	6,080	5,950	6,490	5,710	5,720	7,820	10,200	5,380	4,850	5,720	6,250
15	6,350	6,210	6,080	7,550	5,710	5,720	7,820	9,610	5,380	4,850	5,720	6,250
16	6,210	6,210	6,210	8,340	5,710	5,720	8,180	7,650	5,380	5,020	5,720	6,300
17	6,350	6,210	6,210	8,180	5,710	5,720	8,000	5,900	5,380	5,020	5,720	6,300
18	6,350	6,210	6,080	8,340	5,710	5,720	8,880	5,550	5,380	5,200	5,550	6,300
19	6,490	6,210	6,080	8,000	5,800	5,720	8,520	5,200	5,380	5,020	5,720	6,350
20	6,490	6,210	6,080	7,600	5,900	5,720	7,650	4,850	5,550	5,020	5,720	6,350
21 22 25 24 25	6,350 6,350 6,350 6,210 6,210	6,210 6,210 6,080 6,210 6,080	6,080 6,080 6,080 6,080 6,080	7,850 7,400 5,950 5,950 5,950	6,000 6,080 6,080 6,080	5.720 5,720 5,720 5,720 7,120	8,350 7,300 7,820 5,000 10,600	4,850 5,720 5,550 5,650 5,720	5,380 5,380 5,200 5,200 5,020	5,200 5,200 5,200 5,200 5,200	5,720 5,720 5,720 5,720 5,720	6,350 6,400 6,400 6,400 6,420
26 27 28 29 50 31	6,210 6,210 6,080 6,080 6,080 6,080	6,210 6,080 6,080 6,080 6,080	5,950 6,080 6,080 5,950 5,950 5,950	5,950 5,950 5,820 5,820 5,950 5,910	6,080 6,080 5,900 -	7,300 7,300 7,300 8,350 9,420 9,610	10,200 9,240 8,000 6,950 7,120	5,720 5,250 4,800 4,850 5,200 5,720	5,020 5,020 5,020 5,020 4,850	5,200 5,380 5,380 5,380 5,380 5,380	5,720 5,720 5,900 5,900 5,900 5,900	6,420 6,250 6,420 6,420 6,420

Month	Second- foot-days	Maximum	Winimm	Kean	Run-off in acre-feet
October	194,930 184,610 188,230	6,490 6,210 6,350	6,080 6,080 5,950	6,288 6,154 6,072	356,600 366,200 373,300
Calendar year 1936	2,473,100	25,500	5,220	6,757	4,905,000
Jameary February March April May June June July August Beptomber	201,560 164,150 196,380 255,950 216,100 160,590 176,680 187,480	8,340 6,080 9,610 10,600 10,900 6,250 5,380 5,900 6,420	5,820 5,710 5,720 6,950 4,850 4,850 4,680 5,380 5,900	6,502 5,662 6,335 8,532 6,971 5,353 5,009 5,699 6,249	399,800 325,600 359,500 507,700 428,600 318,500 308,000 350,400 371,900
Water year 1936-37	2,281,940	10,900	4,680	6,252	4,526,000

Snake River at King Hill, Idaho

Location.- Water-stage recorder, lat. 43°00', long. 115°11', in SW2 sec. 7, T. 5 S., R. 11 E., 300 feet east of railroad station at King Hill and 20 miles below Big Wood River.

Records available .- May 1909 to September 1937.

Average discharge. - 28 years, 10,820 second-feet.

Extremes.- Maximum discharge during year, 12,700 second-feet May 11 (gage height, 7.89 feet); minimum, 6,520 second-feet July 11 (gage height, 5.45 feet).
1909-37: Maximum discharge, 47,200 second-feet Jule 22, 1918 (gage height, 16.3 feet); minimum, 4,760 second-feet July 7-9, Aug. 15, 16, 1910 (gage height, 4.5 feet).

Remarks.- Records excellent. Discharge for Jan. 25-27 interpolated. Practically entire flow at Milner diverted during irrigation season, so that flow at King Hill is derived largely from springs and from seepage entering below Milner.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Got.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	8,230 8,230 8,230 8,230 8,230 8,230	8,230 8,230 8,230 8,230 8,480	7,980 7,980 7,980 7,980 7,730	7,730 7,730 7,490 7,490 7,730	7,730 7,490 7,730 7,730 7,980	7,730 7,730 7,730 7,730 7,730	11,800 12,400 11,800 12,100 11,500	9,800 10,100 10,900 9,800 9,260	7,730 7,980 7,490 7,250 7,010	6,780 6,550 6,550 7,010 7,010	7,490 7,490 7,250 7,250 7,250	7,730 7,730 7,730 7,730 7,730 7,986
6 7 8 9 10	8,480 8,480 8,230 8,230 7,980	8,230 8,230 8,230 8,230 8,230	7,980 7,980 8,230 8,230 8,230	7,730 7,730 7,490 7,490 7,490	7,730 7,730 7,730 7,730 7,490	7,730 7,730 7,730 7,730 7,730	11,500 10,100 9,530 9,000 9,000	8,230 7,730 7,250 6,780 10,600	7,250 7,250 6,780 7,010 7,250	6,780 6,550 6,780 6,780 6,780	7,250 7,250 7,250 7,250 7,250 7,490	7,980 7,980 7,730 7,980 8,230
11 12 13 14 15	7,980 7,980 8,230 8,230 8,230	8,230 7,980 7,980 7,980 8,230	7,980 7,730 7,730 7,730 7,730	7,490 7,730 7,730 7,980 9,260	7,490 7,490 7,490 7,490 7,730	7,980 8,230 9,000 9,800 9,000	10,900 10,400 10,600 10,100 9,800	12,100 12,100 21,400 12,100 10,900	7,010 7,010 7,010 7,250 7,250	6,780 6,780 6,780 6,780 6,780	7,250 7,250 7,250 7,250 7,250 7,250	7,980 7,980 7,980 7,980 7,980
16 17 18 19 20	8,230 8,230 8,480 8,480 8,480	8,230 8,230 8,230 8,230 8,230	8,230 7,980 7,980 7,980 7,980	10,400 10,100 10,400 10,100 9,260	7,490 7,490 7,490 7,980 7,490	8,740 8,740 8,480 8,230 7,730	10,100 9,800 10,400 10,400 9,530	9,800 7,980 7,250 7,010 6,780	7,250 7,490 7,490 7,490 7,250	7,010 7,010 7,010 7,010 7,010	7,250 7,250 7,250 7,250 7,250 7,490	8,230 8,230 7,730 7,980 8,230
21 22 23 24 25	8,480 8,480 8,480 8,230 8,230	8,230 8,230 8,230 8,230 8,230	7,980 7,980 7,980 7,980 7,980	9,800 9,530 8,230 7,730 7,730	7,490 7,490 7,730 7,730 7,730	7,730 7,730 7,730 7,730 8,480	9,530 9,800 9,260 9,530 11,800	6,780 7,250 7,250 7,250 7,250	7,250 7,250 7,010 7,010 6,780	7,010 7,010 7,010 7,010 7,010	7,490 7,490 7,490 7,490 7,490	8,230 8,230 8,230 8,230 8,230
26 27 28 29 50 51	8,230 8,230 8,230 8,230 8,230 8,230	8,230 7,980 7,980 8,230 8,230	7,730 7,980 7,980 7,980 7,730 7,730	7,730 7,730 7,730 7,730 7,730 7,730	7,980 7,730 7,730 -	9,260 9,260 9,260 9,000 11,200 11,500	12,100 11,200 10,400 9,260 8,740	7,490 7,010 6,550 6,550 6,780 7,250	6,780 6,780 6,780 6,780 6,780	7,250 7,250 7,250 7,250 7,250 7,250	7,490 7,490 7,730 7,730 7,730 7,980	8,230 8,230 8,230 8,230 8,230
				Second	3			 	Ru	n-off in		

Month	Second- foot-days	Maximum	Minimon	Mean	Run-off in acre-feet
October	256,380 245,900 246,380	8,480 8,480 8,230	7,980 7,980 7,730	8,270 8,197 7,9 4 8	508, 5 00 487, 7 00 488,700
Calendar year 1936	3,152,430	27,000	6,550	8,613	6,253,000
January. February March. April May June June July August September.	255,950 214,310 262,910 312,380 266,280 214,700 215,070 229,560 241,400	10,400 7,980 11,500 12,400 12,400 7,980 7,250 7,980 8,230	7,490 7,490 7,730 8,740 6,550 6,780 6,550 7,250 7,730	8,256 7,654 8,481 10,410 8,590 7,157 6,938 7,405 8,047	507,700 425,100 521,500 619,600 528,200 425,900 426,600 455,300 478,800
Water year 1936-37	2,961,220	12,400	6,550	8,113	5,874,000

Snake River near Murphy, Idaho

Location.- Water-stage recorder, lat. 43°18', long. 118°26', in NE‡ sec. 35, T. 1 S., R. I W., 4‡ miles below Swan Falls power plant, and 7½ miles northeast of Murphy.

Drainage area. - 41,900 square miles.

Records available .- August to October 1912, August 1913 to September 1937.

Average discharge. - 24 years (1913-37), 10,830 second-feet.

Extremes.- Maximum discharge during year, 14,300 second-feet Mar. 31, Apr. 2 (gage height, 6.20 feet); minimum, 5,620 second-feet July 9 (gage height, 3.20 feet).

1912-37: Maximum discharge, 47,300 second-feet June 22, 1918 (gage height, 13.95 feet, former site and datum); minimum observed 3,950 second-feet (discharge measurement), July 20, 1934, when stage was below inlet pipe.

Remarks.- Records excellent. Discharge for period of missing gage heights, Jan. 8 to Feb. 7, computed on basis of records for station at King Hill that for Sept. 25-27 interpolated. Large diurnal fluctuations of short duration are caused by operation of gates and power plant at dam. Several pumping diversions between this station and the one at King Hill.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	8,460 8,460 8,460 8,460 8,460	8,750 8,750 8,750 8,750 8,750	8,460 8,170 8,170 8,170 8,170	7,890 7,750 7,750 7,750 7,750 7,750	7,900 7,900 7,900 7,900 7,900	7,890 7,890 8,030 8,030 7,890	12,100 13,400 12,700 12,700 12,100	9,040 10,200 10,500 11,200 10,200	8,030 8,460 8,460 8,170 7,890	6,920 7,200 6,790 6,790 7,470	7,330 7,060 7,330 7,330 7,470	8,030 8,030 7,890 7,890 7,890
6 7 8 9 10	8,460 8,460 8,750 8,460 8,460	8,750 8,750 8,750 8,750 8,750	8,030 8,170 8,170 8,460 8,460	7,890 7.750 7,750 7,650 7,650	7,900 7,900 7,890 7,890 7,890	7,890 7,890 8,030 8,030 8,030	12,700 12,100 12,100 11,200 10,200	9,930 9,040 8,460 8,030 7,610	7,610 7,610 8,030 7,330 7,750	7,060 6,920 6,660 6,520 6,790	7,470 7,200 7,330 7,330 7,330	7,890 8,030 8,170 7,890 8,170
11 12 13 14 15	8,170 8,170 8,030 8,170 8,460	8,750 8,750 8,460 8,460 8,460	8,170 8,170 8,030 8,030 7,890	7,650 7,750 7,900 8,000 8,800	7,750 7,610 7,890 7,750 7,750	8,170 8,170 8,460 9,630 9,930	9,930 11,500 10,500 11,500 10,800	11,200 13,000 12,700 13,000 12,400	7,750 7,890 7,330 7,750 7,750	7,060 6,920 6,790 7,200 6,920	7,330 7,200 7,200 7,200 7,470	8,460 8,030 8,170 8,170 8,030
16 17 18 19 20	8,460 8,170 8,460 8,460 8,750	8,460 8,750 8,750 8,460 8,460	8,030 8,460 8,170 8,170 8,170	10,000 10,400 10,400 10,400 9,850	7,890 7,750 7,610 7,750 8,030	9,330 9,330 9,040 9,040 8,750	10,800 11,200 10,800 11,200 11,200	12,100 10,500 8,750 8,460 8,030	7,890 7,750 7,890 7,890 8,030	6,920 6,790 7,330 7,200 7,060	7,200 7,330 7,200 7,470 7,200	8,170 8,170 8,170 8,030 8,170
21 22 23 24 25	8,750 8,750 8,750 8,750 8,750 8,460	8,460 8,460 8,460 8,460 8,460	8,170 8,170 8,170 8,170 8,030	9,700 9,850 9,050 8,150 7,900	7,890 7,750 7,750 7,750 7,890	8,460 8,170 8,170 8,170 7,890	9,930 10,200 10,500 9,630 9,930	8,030 7,610 7,610 8,030 8,170	7,890 7,750 7,890 7,750 7,330	7,200 6,920 7,200 7,330 7,330	7,470 7,470 8,030 7,470 7,200	8,170 8,460 8,460 8,460 8,460
26 27 28 29 30 31	8,460 8,460 8,460 8,460 8,750 8,750	8,170 8,170 8,170 8,170 8,170	8,170 8,170 8,030 8,170 8,030 8,030	7,900 7,900 7,900 7,900 7,900 7,900	7,890 8,030 8,030 - -	8,750 9,630 9,630 9,630 10,200 11,500	12,100 12,400 11,800 10,800 9,930	7,890 8,170 7,750 7,330 7,330 7,610	7,060 7,330 7,200 7,330 7,060	7,610 7,330 7,330 7,470 7,200 7,750	7,610 7,750 7,890 7,750 7,610 7,890	8,460 8,460 6,460 8,460 8,460

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	262,990 256,410 253,030	8,750 8,750 8,460	8,030 8,170 7,890	8,484 8,547 6,162	521,600 508,600 501,900
Calendar year 1936	3,396,160	28,900	6,790	9,279	6,736,000
January February Karch April Hay Jun Jun July August September	260,780 219,730 269,650 337,950 289,880 231,850 219,980 230,120 245,760	10,400 8,030 11,500 13,400 13,000 8,460 7,750 8,030 8,460	7,650 7,610 7,890 9,630 7,330 7,060 6,520 7,060 7,890	8,412 7,848 8,698 11,260 9,351 7,728 7,096 7,423 8,192	517,200 435,800 534,800 670,300 575,000 459,900 456,300 456,400 487,500
Water year 1936-37	3,078,130	13,400	6,520	8 ,43 3	6,105,000

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Snake River at Weiser. Idaho

Location.- Water-stage recorder, lat. 44°15', long. 116°59', in sec. 31, T. 11 N., R. 5 W., a third of a mile above wagon bridge at Weiser. Zero of gage is 2,087.22 feet above sea level.

Records available. October 1910 to September 1937. Fragmentary gage-height record obtained by U. S. Weather Bureau since 1895.

Average discharge. - 26 years (1911-37), 17,490 second-feet.

Extremes. Maximum discharge during year, 36,900 second-feet Apr. 16; maximum gage height, 10.42 feet Jan. 18 (ice jam); minimum discharge, 7,140 second-feet July 12 (gage height, 2.12 feet).
1910-37: Maximum discharge, 83,100 second-feet May 23, 1921 (gage height, 1.35 feet).
Maximum stage known, 15.70 feet on old Weather Bureau gage (discharge, about 100,000 second-feet) Mar. 3, 1910.
Flood of June 1894 was considerably higher than flood of 1910.

Remarks. - Records excellent except those for period of ice effect, Jan. 4 to Feb. 14, Which were computed on basis of weather records and records for stations at Murphy and Oxbow and are fair. Flow regulated by storage reservoirs above station and by operation of Swan Falls power plant. Some diversions for irrigation below Murphy.

Gage-height record collected in cooperation with U. S. Weather Bureau.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	10,400 10,200 9,970 9,970 9,780	11,100 11,100 11,100 11,100 11,100	10,700 10,700 10,700 10,700 10,700	10,400 10,200 9,970		11,100 11,100 11,100 11,500 11,100	17,200 21,100 20,100 21,100 20,600	15,500 14,800 16,200 18,600 19,600	15,800 14,800 14,400 14,000 13,600	9,050 8,510 8,340 7,980 7,470	8,690 8,690 8,340 8,510 8,690	8,870 8,870 9,050 9,050 9,050
6 7 8 9 10	9,780 9,780 9,970 10,200 10,200	11,100 11,500 11,500 11,100 11,500	10,700 10,700 11,100 11,100 11,500	10,000	10,500	10,700 10,700 11,100 11,500 11,500	22,200 22,200 20,100 17,200 16,200	19,100 18,600 18,100 15,800 15,800	12,700 12,700 12,300 12,300 12,300	8,160 8,160 7,810 7,640 7,300	8,340 8,510 8,510 8,160 7,980	9,050 9,050 9,230 9,050 9,050
11 12 13 14 15	9,970 10,200 10,200 10,200 10,400	11,100 11,100 11,100 11,100 11,100	11,100 10,700 10,700 10,700 10,700		10,700	11,900 12,700 13,600 15,800 17,600	16,700 16,200 18,600 18,600 24,900	15,500 17,600 19,600 19,600 21,100	13,100 13,600 14,000 13,100 13,100	7,300 7,640 7,640 7,470 7,810	8,160 8,340 8,160 8,160 7,980	8,870 9,050 9,420 8,870 9,050
16 17 18 19 20	10,400 10,500 10,700 10,700 11,100	11,100 11,100 11,100 11,100 11,100	10,700 10,700 11,100 11,100 11,100	12.000	10,400 10,200 10,400 10,200 10,200	19,100 19,100 19,100 17,200 14,800	35,000 29,500 25,500 22,700 21,700	20,600 20,100 19,600 18,600 20,100	12,700 12,700 13,100 13,100 13,600	7,810 7,640 7,640 7,810 8,160	8,160 8,160 8,160 8,160 8,160	9,230 9,230 9,230 9,230 9,420
21 22 23 24 25	11,100 11,100 11,100 11,100 11,100	11,100 11,100 11,100 10,700 10,700	10,700 10,700 10,700 10,500 10,700		10,700 10,400 10,400 10,500 10,500	14,400 13,100 12,700 12,700 12,700	21,100 20,100 18,600 18,600 16,700	17,600 17,600 17,200 17,200 17,200	14,400 14,500 14,400 14,000 13,100	7,810 7,980 7,810 7,810 8,160	7,980 8,340 8,160 8,510 8,510	9,230 9,600 9,600 9,600 9,780
26 27 28 29 30 31	11,100 11,100 11,100 11,100 11,100 11,100	10,700 10,500 10,500 10,500 10,400	10,500 10,500 10,700 10,400 10,500 10,200	10,500	10,700 10,700 11,100	12,300 12,700 14,000 14,000 13,600 14,000	17,200 19,100 21,100 19,600 18,100	18,100 18,100 18,100 18,100 17,600 17,200	11,900 10,200 9,970 9,230 9,420	8,510 8,870 8,690 8,340 8,690 8,160	8,160 8,340 8,690 8,340 8,510 8,690	9,780 9,970 9,970 9,970 9,780

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October. November. December.	326,720 330,500 333,300	11,100 11,500 11,500	9,780 10,400 10,200	10,540 11,020 10,750	648,000 655,500 661,100
Calendar year 1936	5,782,290	59,900	7,980	15,800	11,470,000
January. February March. April May June July August September.	332,070 298,300 418,500 617,600 559,100 388,420 248,170 258,250 279,200	19,100 35,000 21,100 15,800 9,050 8,690 9,970	10,700 16,200 14,800 9,230 7,300 7,980 8,870	10,710 10,650 13,500 20,590 18,040 12,950 8,005 8,331 9,307	658,700 591,700 830,100 1,225,000 1,109,000 770,400 492,200 512,200 553,800
Water year 1936-37	4,390,130	35,000	7,300	12,030	8,708,000

Snake River at Oxbow, Oreg.

Location.- Water-stage recorder, lat. 44°57', long. 116°51', in NW1 sec. 16, T. 7 S., R. 48 E., at Oxbow, five-eighths of a mile above intake of diversion turnel for Oxbow power plant.

Records available .- May 1923 to September 1937.

Average discharge. - 14 years, 15,470 second-feet.

Extremes. - Maximum discharge during year, 37,100 second-feet Apr. 16 (gage height, 14.30 feet); minimum, 6,330 second-feet Jan. 8 (gage height, 6.86 feet).

1923-37: Maximum discharge, 70,600 second-feet Feb. 6, 1925; maximum gage height, 19,33 feet May 13, 1928; minimum discharge, 4,890 second-feet Aug. 6, 1924 (gage height, 6.30 feet).

Remarks.- Records excellent except those for periods of missing or incomplete gageheight record, Jan. 8, 19-28, which were computed on basis of records for station near Murphy and are good. Flow regulated by irrigation and operations of power plants above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr	٠.	May	June	July	Aug	.	Sept.
1 2 5 4 5	10,500 10,500 10,200 10,200 10,200	11,200 10,800 11,200 11,200 11,200	10,500 10,800 11,200 10,800 11,200	9,580 10,200 9,880 9,580 9,580	11,800 12,600 12,600 13,300 14,000	11,500 11,800 11,800 11,800 12,200	16,0 20,7 22,0 21,1 22,9	000	18,100 17,200 16,400 18,500 20,200	17,700 16,400 15,600 15,600 14,800	9,580 9,290 8,740 8,740 8,210	8,2 8,7 8,7 8,4 8,2	40 40 70	8,740 9,010 9,290 9,290 9,010
6 7 8 9 10	9,880 9,880 9,880 10,200 10,200	11,200 11,200 11,500 11,500 11,200	11,200 10,800 10,600 11,200 11,500	9,290 8,210 9,000 8,210 7,230	13,700 12,900 12,900 12,600 12,200	11,800 11,500 11,800 12,200 12,600	22,0 23,8 22,9 20,7	300 300 700	21,100 20,200 19,800 18,900 17,200	14,000 13,300 12,900 12,600 13,300	7.960 8,470 8,210 8,210 7,710	8,4 8,4 8,4 8,4	70 70 70	9,290 9,010 9,010 9,290 9,290
11 12 13 14 15	10,200 10,200 10,200 10,200 10,200	11,200 11,200 11,200 11,200 11,200	11,500 11,200 10,800 10,800 10,500	7,710 8,210 8,210 9,010 9,880	12,200 11,800 11,800 12,200 12,600	12,600 13,300 14,000 15,600 17,200	18,1 18,1 18,9 20,7	100 900 700	17,200 16,400 20,200 20,700 21,600	13,300 14,000 14,000 14,000 13,300	7,710 7,710 7,710 7,960 7,710	8,2 8,4 8,2 8,2	70	9,290 9,010 9,290 9,290 9,010
16 17 18 19 20	10,200 10,500 10,800 10,800 11,200	11,200 10,800 11,200 11,200 11,500	10,800 10,800 10,800 11,200 11,200	10,200 11,500 12,200 13,000 13,000	12,600 11,800 11,500 11,500 11,200	18,900 20,700 10,800 19,800 16,800	32,2 33,8 28,6 25,7 23,4	300 300 700	22,500 21,600 21,600 20,700 20,700	13,700 13,300 13,700 13,700 14,400	8,210 8,210 7,960 7,960 8,210	8,2 8,4 8,2 8,2	70 10 10	9,290 9,290 9,290 9,290 9,580
21 22 23 24 25	11,200 11,200 11,200 11,200 11,500	11,200 11,200 11,200 11,200 11,200	11,200 10,800 10,800 10,800 10,500	13,000 12,500 12,000 11,500 10,500	11,200 11,200 10,800 10,800 10,800	15,600 14,800 14,000 13,700 13,300	22,6 21,6 20,7 19,8 18,9	300 700 300	20,700 19,400 18,900 18,900 18,900	14,800 15,600 15,200 14,800 14,400	8,210 7,960 8,210 7,960 7,960	8,2 8,4 8,4 8,7	10 70 70	9,580 9,580 9,880 9,880 9,880
26 27 28 29 30 31	11,200 11,200 11,200 10,800 11,200 11,200	10,800 10,800 10,500 10,500 10,500	10,800 10,500 10,500 10,500 10,200 10,500	9,500 9,580 10,200 10,800 11,500 11,800	10,800 11,200 11,500	13,300 12,900 14,000 14,800 14,800 14,400	18,1 18,1 21,6 21,6 20,2	100 300 300	18,900 19,800 19,400 19,400 18,500 18,100	13,300 11,800 11,500 10,500 9,580	8,470 8,740 9,010 8,740 8,470 8,470	8,7 8,7 8,7 8,7	10 40 40 40	9,880 10,200 10,200 10,200 10,200
		k	ionth			Second foot-de		Max	timum	Minimum	Nea	n		-off in e-feet
NoA	ember					329, 333, 336,	200		11,500 11,500 11,500	9,88 10,50 10,20	0 11	,620 ,110 ,860	6	53,000 60,900 67,800
0	alendar	year 193	6	• • • • • • • •	••••••	5,997,	330		62,500	7,96) 16	,390	11,9	00,000
Mar Apr May Jun	January February March April May June June					316, 336, 443, 654, 601, 415, 256,	100 300 000 700 080 670		13,000 14,000 20,700 33,800 22,500 17,700 9,580	7,23 10,80 11,50 16,00 16,40 9,58 7,71	12 0 14 0 21 0 19 0 13 0 8	,220 ,000 ,300 ,800 ,410 ,840 ,280	1,2 1,1 1,1	28,500 66,600 79,300 97,000 93,000 23,300 09,100
Sep	August September					261, 283,]	8,740 10,200	8,21 8,74	9 (0	,422 ,445	5.	17,900 62,000
	ater yea	r 1936-3	7	• • • • • • • • • • • • • • • • • • • •	•••••	4,567,	280		33,800	7,23	12	,510	9,0	58,000

Snake River near Clarkston, Wash.

Location.- Water-stage recorder, lat. 46"25'30", long, 117°10'30", in lot 1, sec. 16, T. 11 N., R. 45 E., 2 miles above Alpowa Creek, 7 miles below Clarkston, and 134 miles above mouth. Zero of gage is 670 feet (revised) above mean sea level (benchmark of Corps of Engineers, U. S. Army). Brainage area. - 103,200 square miles. Records available. October 1935 to September 1937. October 1915 to September 1922 and August 1928 to September 1935 (in reports of Geological Survey) and October 1909 to September 1933 (in State Water-Supply Bulletin 5), at Riparia, 66 miles downstream; records equivalent.

records equivalent.

Average discharge. 28 years (1909-37), 48,190 second-feet.

Extremes. Maximum discharge during year, 114,000 second-feet May 19 (gage height, 23.76 feet); minimum, possibly as low as 9,000 second-feet sometime during period of ice

effect.
1909-37: Maximum discharge observed, 270,000 second-feet May 20, 1921 (gage height, 19.0 feet, at Riparia); maximum stage known, 24.7 feet at Riparia June 5, 1894 (discharge, about 409,000 second-feet); minimum occurred sometime during period of ice effect, Jan. 6 to Feb. 20, 1937.

Remarks.- Records excellent except those for period of ice effect, Jan. 6 to Feb. 20, Which were computed on basis of gage heights, weather records, and records for Columbia River at The Dalles not including tributaries and are poor. Small diversions by pumping between this station and the one at Oxbow, Considerable diurnal fluctuation as a result of pondage for power on Clearwater River at Lewiston.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

8.0	10,000	11.0	20.500	18.0	60.500
8.5	11,440	12.0	24.800	20.0	77,500
9.0	13,000	13.0	29.500	22.0	96,000
9.5	14,700	14.0	34,800	25.0	126,000
10.0	16,500	16.0	46,700		-

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	16,100 16,200 15,900 16,100 16,500	17,200 17,500 17,400 16,900 16,400	14,500 14,100 16,300 18,300 17,500	15,500 14,500 13,500 14,300 14,200	11,500 12,000 12,500 13,000 13,500	19,800 20,100 20,900 22,100 22,800	32,800 39,900 42,200 40,700 39,500	52,500 53,400 63,700 79,600 91,900	81,100 79,100 81,000 81,800 75,600	36,200 34,200 32,000 30,200 28,900	16,700 16,500 17,900 17,300 16,600	13,900 13,800 14,100 14,200 14,600
6 7 8 9	15,600 16,200 15,900 16,000 15,800	17,100 18,000 15,300 17,900 17,500	17,500 17,900 18,100 19,000 18,900	12,600 11,500 10,200 9,100 9,300	14,000 14,000 14,000 13,500 13,000	23,700 23,600 23,600 23,600 24,100	40,500 39,200 39,600 38,700 38,600	93,200 89,000 86,300 86,500 88,600	69,100 64,700 61,500 61,900 66,200	27,100 25,900 25,700 24,500 23,600	16,200 15,900 15,200 15,600 15,200	14,800 15,200 14,900 14,900 14,800
11 12 13 14 15	16,400 16,500 15,700 16,400 16,200	16,400 17,100 16,900 17,100 17,800	18,400 17,500 17,100 16,800 16,500	9,500 9,700 9,900 10,100 10,300	13,600 14,300 15,000 15,200 15,300	25,100 27,400 30,400 31,200 31,800	36,800 36,800 37,200 53,300 70,000	89,700 90,300 87,400 94,400 103,000	71,700 65,600 64,400 61,600 59,900	22,700 21,800 21,100 20,900 20,500	15,300 15,300 15,100 14,800 14,500	14,600 14,300 14,000 14,300 13,900
16 17 18 19 20	16,100 16,900 16,800 17,300 16,800	17,400 17,500 17,700 18,300 17,800	16,600 16,900 17,200 17,200 18,100	10,500 10,500 10,500 10,300 10,200	15,400 15,500 15,800 16,200 16,500	34,900 37,700 39,400 37,200 34,400	76,100 66,900 59,600	104,000 104,000 106,000 110,000	58,800 59,700 58,800 57,600 59,800	20,200 20,300 19,600 19,100 18,500	14,400 14,000 14,400 13,900 13,900	13,800 13,800 13,900 13,700 13,800
21 22 23 24 25	17,200 17,100 17,000 16,800 17,200	17,900 17,100 17,400 17,100 16,600	17,700 17,500 17,600 18,400 19,000	10,000 10,300 10,600 11,000 11,600	16,900 17,300 17,400 17,600 18,000	29,600 27,800 26,700 25,900 25,800	61,100 64,500 56,500 51,100 47,500	103,000 97,600 97,700 98,800 99,800	69,800 66,900 65,100 60,400 54,900	18,300 18,200 17,700 17,000 16,900	13,500 13,500 13,400 13,900 13,600	14,100 14,200 14,200 15,300 16,000
26 27 28 29 30 31	17,800 17,300 17,200 17,200 17,100 16,600	15,800 15,700 15,400 14,400 15,000	18,600 17,800 17,400 17,200 16,800 16,200	12,300 13,000 13,000 12,400 11,700 11,000	1e,300 18,700 19,000	25,900 26,100 26,300 27,700 28,700 30,100	52,700 59,300	106,000 108,000 109,000 106,000 94,800 85,800	52,000 44,700 43,100 40,200 38,100	16,700 17,400 18,400 18,600 17,700 17,000	14,400 13,700 13,400 13,500 13,900 13,500	13,600 15,200 15,300 15,400 15,400

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in aore-feet
October	513,900 510,600 538,600	17,800 18,300 19,000	15,600 14,400 14,100	16,580 17,020 17,370	1,019,000 1,013,000 1,068,000
Calendar year 1936	15,894,800	213,000	13,000	43,430	31,530,000
Jamery. February March April May June June July August August September	353,100 427,000 e54,600 1,518,300 2,890,000 1,875,100 686,900 459,000 434,000	15,500 19,000 39,400 76,100 110,000 81,800 36,200 17,900 18,000	9,100 11,500 19,800 32,800 52,500 38,100 16,700 13,400 13,600	11,390 15,250 27,570 50,610 93,230 62,500 22,160 14,810 14,470	700,400 846,900 1,695,000 3,012,000 5,732,000 3,719,000 1,362,000 910,400 860,800
Water year 1936-37	11,061,100	110,000	9,100	30,300	21,940,000

Flat Creek near Jackson, Wyo.

Location.- Staff gage, lat. 43°33', long. 110°37', in SW2 sec. 35, T. 42 N., R. 115 W., 9 miles northeast of Jackson, just below power plant of Jackson Hole Light & Power Co.

Records available. - June 1933 to September 1937, except for winters.

Extremes. - Maximum discharge observed during year, 214 second-feet June 23-24 (gage height, 2.85 feet); minimum daily discharge, 11 second-feet April 11-18.

1935-37: Maximum discharge observed, 438 second-feet June 15, 1935 (gage height 3.48 feet); minimum, 7 second-feet April 15-18, 1935 (gage height 1.06 feet).

Remarks.- Records good except those for periods of missing gage heights, Oct. 1 to Nov. 30, Mar. 1 to Apr. 8, Apr. 10, which were computed on the basis of five discharge measurements and weather records and are fair. No regulation.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge in second-feet)

0.8 10.5 1.0 15 1.2 22.7 1.4 34.5 1.6 53 1.8 74 2.0 97 2.5 164 3.0 237

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	- *29 -					=	13 13 13 13 13	13 13 13 13 13	143 130 116 104 104	136 135 121 107 115	49 46 44 43 43	27 26 26 27 27
6 7 8 9	-	-				-	1 3 13 13 *14 12	13 13 13 14 14	104 123 116 116 91	116 114 109 107 91	41 41 40 38 37	25 25 25 25 25 25
11 12 13 14 15	- - -	1111				-	11 11 11 11 11	14 15 16 20 22	91 85 97 104 110	97 87 95 87 87	36 35 34 34 34	25 25 24 24 24
16 17 18 19 20	*26 - -	*22 - -				=	11 11 11 12 12	24 28 31 34 37	110 123 130 143 143	81 80 74 74 72	34 34 34 33 33	23 23 23 23 23
21 22 23 24 25	-					*13 - -	12 12 12 13 13	41 46 58 76 83	164 185 214 214 192	68 67 65 63 61	32 31 31 30 29	23 23 23 23 23
26 27 28 29 30 31						-	13 13 12 12 12	86 104 128 154 150 146	164 150 150 136 130	59 55 53 51 51	28 28 28 27 27 27	23 22 22 22 22

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	837 660 -		111	27.0 22.0	1,660 1,310
Calendar year					
January February March	403	-	-	13.0	799
Aprillkay	1,444 3,952	14 154 214 136	11 12 85 51	12.2 46.6 133 84.8	726 2,860 7,900 5,210
August	1,081 721	49 2 7	27 22	34.9 24.0	2,140 1,430
Water year					l

^{*}Discharge measurement.

Greys River near Alpine, Wyo.

(Formerly published as Greys River near Alpine, Idaho)

Location.- Water-stage recorder, lat. 43°09', long. 111°00', in sec. 33, T. 37 N., R. 118 W., $1\frac{1}{8}$ miles above mouth and 3 miles southeast of Alpine.

Records available. July 1917 to September 1918, March to September 1937.

Extremes.- Maximum discharge during year, 2,070 second-feet May 19 (gage height 2.98 feet); minimum during period of record, 159 second-feet March 29 (gage height 0.24 feet).

1917-18, 1937: Maximum discharge during period of record, 5,200 second-feet June 14, 1918 (gage height 4.85 feet, on old gage); minimum, that of March 29, 1937.

Remarks .- Records excellent. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5						-	182 207 195 182 195	536 832 1,120 1,320 1,520	1,410 1,320 1,370 1,460 1,320	904 848 e17 778 746	426 389 374 360 356	272 276 276 276 276 269
6 7 8 9 10						-	158 185 176 158 207	1,610 1,800 1,830 1,710 1,520	1,200 1,140 1,150 1,160 1,160	754 723 731 692 638	351 351 338 342 329	262 258 258 280 272
11 12 13 14 16							227 214 233 292 360	1,460 1,400 1,510 1,650 1,740	1,230 1,300 1,180 1,140 1,150	646 601 601 616 638	320 320 320 312 316	262 258 258 254 251
16 17 18 19 20				I		198 195 195 195	384 338 312 351 394	1,510 1,860 1,900 1,930 1,730	1,230 1,340 1,230 1,210 1,240	565 516 488 468 456	312 316 316 304 300	251 247 247 247 247
21 22 25 24 25						195 195 195 192 188	432 438 379 342 370	1,570 1,620 1,720 1,770 1,770	1,370 1,440 1,400 1,260 1,130	444 438 432 426 420	300 258 284 254 250	247 247 265 262 254
26 27 28 29 30 31						182 170 164 159 167 164	522 739 661 509 450	1,780 1,810 1,880 1,840 1,670 1,540	1,040 992 944 928 976	414 398 389 379 384 462	280 276 276 276 276 276 272	251 251 247 247 247

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in
October					
Calendar year					
January. February. Harch 17-51. April . Hay June July August September.	2,754 9,852	198 739 1,930 1,460 904 426 280	159 176 536 928 379 272 247	184 328 1,605 1,214 575 318 258	5,460 19,540 98,690 72,240 35,330 19,530 15,350
The period					266,100

Salt River near Smoot, Wyo.

Location.- Water-stage recorder, lat. 42°36', long. 110°55', in sec. 7, T. 30 N., R. 118 W., $1\frac{1}{4}$ miles south of Smoot.

Drainage area. - 59.4 square miles.

Records available .- June 1932 to September 1937.

Extremes. Maximum discharge during year, 193 second-feet May 18 (gage height, 2.52 feet); minimum not determined, probably occurred during period of ice effect. 1932-37: Maximum discharge, 430 second-feet May 15, 1936 (gage height, 3.15 feet); minimum not determined.

 $\underline{\text{Remarks.-}}$ Records excellent. No records for Nov. 1 to Apr. 18. A few diversions above station for irrigation.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1-31)

0.9 0 1.0 2.6 1.2 12.4 1.4 26 1.6 42 1.8 62 2.0 88 2.2 122 2.4 162 2.6 214

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.
1 2 3 4	9.9 9.9 9.9 10	-						13 22 34 45 77	99 85 82 88 84	44 40 38 36 32	22 20 19 18 17	1.8 2.1 4.0 4.0 6.4
5 6 7 8 9	10 9.9 9.9 9.9	- - *6					1111	90 102 136 124	74 69 68 68	32 33 35 34 32	17 16 15 14	8.4 6.4 5.5 8.4 7.4
10 11 12 13 14 15	9.9 9.9 9.9 9.9 8.9	-						111 108 109 118 136 151	66 67 72 64 63 62	33 33 37 37 40	12 11 9.9 8.9 6.9 4.0	6.9 8.4 8.9 9.9
16 17 18 19 20	5.5 5.0 5.0 5.0	=					- - 8.9 10	149 153 167 167 149	63 72 67 68 72	38 38 35 32 32	3.1 2.3 4.0 3.6 3.6	5.0 8.4 6.0 4.5 6.0
21 22 23 24 25	5.0 5.0 5.0 5.5	-					12 14 11 8.4 8.4	131 133 140 142 133	77 85 84 74 66	31 30 28 25 24	7.9 11 10 9.9 9.9	6.9 6.9 9.4 8.4 8.9
26 27 28 29 30 31	5.5 6.0 6.0 6.0 6.9	-					14 17 14 11	129 129 129 127 117 109	60 58 52 48 45	24 23 21 20 22 29	8.9 7.9 6.4 4.5 4.0 3.1	8.9 8.4 8.9 8.4

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October. November. December.	233.1	10 -	5.0 1	7.52 - -	462 - -
Calendar year					
January February March. April 19-50 May June July August Reptember.	139.7 3,580 2,102 991	17 167 99 44 22	8.4 13 45 20 2.3 1.8	- 11.6 115 70.1 32.0 10.0 7.04	- - 277 7,100 4,170 1,970 616 419
Water year					

^{*}Discharge measurement.

Salt River at Wyoming-Idaho line

Location.- Water-stage recorder, lat. 43°10', long. 111°04', in sec. 16, T. 3 S., R. 46 E., just below mouth of Trout Creek, half a mile above mouth, and three-quarters of a mile west of Wyoming-Idaho State line.

Drainage area. - 890 square miles.

Records available. April 1934 to September 1937. July 1917 to September 1918, at site 4 miles upstream (records not equivalent).

Extremes. - Maximum discharge during year, 1,610 second-feet May 8 (gage height, 3.34 feet); minimum daily discharge, 367 second-feet Mar. 29. 1934-37: Maximum discharge, 3,620 second-feet May 6, 1936 (gage height, 4.64 feet); minimum, 216 second-feet May 17, 1934 (gage height, 1.30 feet).

Remarks. - Records good except those for periods of ice effect, Dec. 13-14, Jan. 6-25, which were computed on basis of one discharge measurement, gage heights, and weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

_												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	633 620 620 627 633	647 633 600 606 613	486 511 498 492 505	486 480 480 475 469	400 415 425 430 430	376 376 376 376 376	405 441 447 430 425	918 1,070 1,230 1,410 1,490	978 927 886 870 845	548 561 568 561 554	561 542 542 542 536	464 452 464 469 475
6 7 8 9	633 627 620 620 620	606 606 600 580 580	511 505 505 511 505	469 420 430 390 390	441 436 436 420 405	380 385 380 385 385	430 430 415 415 441	1,540 1,560 1,590 1,580 1,510	837 814 783 814 799	574 580 594 606 606	536 536 536 536 542	486 486 486 486 486
11 12 13 14 15	613 606 606 613	580 580 580 580 574	505 492 498 510 505	405 425 492 498 498	395 425 430 452 436	385 390 395 395 390	475 464 492 561 647	1,480 1,440 1,420 1,450 1,480	768 776 814 821 806	606 600 613 640 647	529 511 517 505 505	475 475 469 475 475
16 17 18 19 20	620 613 613 613 620	574 568 568 568 561	523 511 505 505 498	490 485 470 460 440	410 415 420 405 400	395 400 405 400 400	739 710 688 717 806	1,450 1,450 1,460 1,460 1,440	746 717 703 695 688	647 633 627 613 606	498 492 492 486 475	480 475 469 469 458
21 22 23 24 25	620 613 606 606 606	554 548 542 536 529	498 492 498 486 492	430 410 385 390 405	410 395 395 395 385	400 395 400 395 390	944 1,110 995 894 927	1,320 1,220 1,210 1,180 1,140	681 667 647 627 620	580 568 568 580 580	469 469 469 469	441 441 458 464 4 64
26 27 28 29 30 31	613 620 620 620 620 633	529 523 517 511 505	498 492 498 505 498 492	385 380 380 380 380 385	395 395 385	385 376 371 367 371 376	1,080 1,270 1,210 1,020 918	1,070 986 970 902 861 886	620 600 587 548 554	574 568 554 561 561 568	469 469 469 469 469	464 469 469 469 469

Month	Second- foot-days	Maximum	Minimum	Mean	Rum-off in acre-feet
October	19,160 17,098 15,530	633 647 523	606 505 486	618 5 70 501	38,000 33,910 30,800
Calendar year 1936	326,586	3,460	345	892	647,700
January February Barch April Bay June June Juny August Reptember	11,581 11,976 20,946 40,173 22,238 18,246	498 452 405 1,270 1,590 978 647 561 486	380 385 367 405 861 548 548 469 441	434 414 386 698 1,296 741 589 503 469	26,700 22,970 23,750 41,550 79,680 44,110 36,190 30,900 27,930
Water year 1936-37	220,070	1,590	367	603	436,500

Cottonwood Creek near Smoot, Wyo.

Location. Water-stage recorder, lat. $42^{\circ}37'$, long. $110^{\circ}53'$, in sec. 4, T. 30 N., R. 118 W., $1\frac{1}{8}$ miles southeast of Smoot.

Drainage area. - 26 square miles.

Records available. - May 1933 to September 1937.

Extremes. Maximum discharge during year, 137 second-feet June 22 (gage height, 1.98 feet); minimum daily discharge, 8.8 second-feet Jan. 28-31.

1933-37: Maximum discharge observed, 424 second-feet June 17, 18, 1933 (gage height, 2.76 feet, former datum); minimum daily discharge, 8.5 second-feet Feb. 28 to Mar. 2, 1935.

Remarks.- Records excellent except those for periods of ice effect, Dec. 5 to Mar. 12 which were computed on basis of one discharge measurement and weather records and are fair. One small diversion above station. Flow regulated by storage in Cottonwood Lake.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used May 4-29)

0.9	9
1.0	13
1.2	26
1.4	44
1.6	68
1.8	99
2.0	142

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	22 22 22 22 22 22	19 19 19 19 20	17 15 15 15 15	12 11 11 11 11	9.2 9.4 9.6 9.6 9.8	10 9.8 9.4 9.4 9.4	9.8 9.8 9.8 9.8	16 16 18 22 26	96 89 89 85 83	85 83 77 74 72	45 45 55 54 52	27 27 27 26 25
6 7 8 9 10	22 22 22 22 22	19 20 19 18 18	15 15 15 14 14	11 12 11 11 10	10 10 9.8 9.6 9.6	9.4 9.6 9.6 9.8 9.8	9.8 9.4 9.0 9.0	31 32 36 39 35	82 78 77 78 78	70 68 68 67 67	51 50 47 45 44	25 24 24 26 25
11 12 13 14 15	22 21 21 21 22 22	18 18 18 18 18	14 14 14 15 15	10 11 11 11 11	9.0 9.2 9.4 10	10 10 10 10 10	9.4 9.8 9.8 11 13	34 33 34 37 41	80 85 80 78 80	63 60 64 64 60	39 38 36 34 39	25 25 23 22 22
16 17 18 19 20	21 21 20 21 22	18 18 18 18 18	15 14 13 13 13	11 11 10 10 9.6	10 10 10 10	10 10 10 11 11	14 12 13 14 15	43 48 60 70 64	58 97 96 99 105	59 58 56 55 54	51 46 39 34 32	22 21 20 20 22
21 22 23 24 25	22 22 22 21 20	17 17 17 17 17	13 13 13 13 13	9.4 9.2 8.8 9.2 9.2	11 11 10 10	10 10 11 10 10	15 15 14 14 14	68 77 86 97 96	115 130 135 128 119	53 52 51 50 47	32 32 31 31 30	25 25 25 23 22
26 27 28 29 30 31	20 20 20 20 20 20	16 16 16 16	13 13 13 13 12 12	9.0 9.8 8.8 8.8 8.8	9.8 10 10 - -	9.8 9.8 9.8 9.8 9.8	16 17 17 16 15	93 96 115 128 119 107	111 105 97 94 89	47 46 45 45 46 48	28 28 28 28 28 27	22 21 21 20 20

Month	Second- foot-days	Maximum	Minimu	Mean	Rum-off in acre-feet
October	659 535 431	22 20 17	20 16 12	21.3 17.8 13.9	1,310 1,060 854
Calendar year1936	17,983	228	10	49.1	35,670
January. February March April May Jun Jun Jul July August September	315.8 276.0 308.0 369.2 1,817 2,846 1,854 1,199	12 11 11 17 128 135 85 55 27	8.8 9.0 9.4 9.0 16 77 45 27 20	10.2 9.86 9.94 12.3 58.6 94.9 59.8 38.7 23.4	626 547 611 732 3,600 5,640 3,680 2,380 1,390
Water year 1936-37	11,312.0	135	8.8	31.0	22,430

Strawberry Creek near Bedford, Wyo.

Location.- Water-stage recorder, lat. $42^{\circ}57^{\circ}$, long. $110^{\circ}54^{\circ}$, in sec. 27, T. 34 N., R. 118 W., $1\frac{1}{8}$ miles east of Bedford.

Drainage area. - 21.3 square miles.

Records available. - June 1932 to September 1937.

Extremes.- Maximum discharge during year, 182 second-feet May 28 (gage height, 3.01 feet); minimum daily discharge, 24 second-feet Mar. 16.
1932-37: Maximum discharge observed, 675 second-feet June 25, 1932 (gage height, 3.00 feet, former site and datum), from rating curve extended above 300 second-feet; minimum not determined.

Remarks. - Records good except those for period of ice effect or of missing gage heights,

Jan. 10 to Apr. 9, which were computed on basis of five open-water gage heights and
weather records and are fair. One small diversion above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	49 49 49 49	51 51 51 51 50	45 44 44 43 43	38 38 38 38 38	33 34 35 36 37	24 24 24 24 24	26 26 27 27 26	34 35 36 39 43	119 118 121 124 116	97 93 93 90 91	69 69 68 66 66	51 51 51 51 50
6 7 8 9	49 49 49 49	50 50 49 49 49	43 43 43 42 42	38 38 38 38 35	37 37 36 36 34	24 24 24 25 25	26 26 26 26 27	47 54 62 70 78	107 101 100 101 104	86 88 84 82 79	64 64 64 62 64	50 49 50 49 49
11 12 13 14 15	49 49 49 49	49 49 48 48 48	42 42 42 42 42	34 34 38 38 38	32 33 34 32 31	25 25 25 25 25 25	27 28 29 29 29	87 83 82 84 90	112 112 107 107 110	77 77 80 82 80	64 64 62 60 60	49 49 49 48 48
16 17 18 19 20	49 49 49 49	48 48 47 47 45	42 42 42 42 42	38 38 38 38 37	28 29 29 28 28	24 25 25 25 25 25	29 29 29 29 29	98 104 112 126 138	121 126 119 118 126	78 77 75 74 73	60 60 59 59 59	48 47 47 47 45
21 22 23 24 25	49 49 49 49	45 45 45 45 45	41 39 39 39 38	36 35 34 34 35	28 27 27 26 25	25 25 25 25 25 25	30 30 30 30 30	127 116 116 126 132	138 151 138 121 113	73 73 73 73 73	57 57 57 56 56	45 45 47 45 44
26 27 28 29 50 31	51 51 51 51 51 51	45 45 45 45 45	41 41 41 39 39 38	35 35 35 34 34 33	26 26 25 -	24 24 24 24 24 25	30 33 34 36 35	137 153 169 172 154 134	108 104 98 97 100	71 70 69 69 70	56 56 56 56 55 53	44 44 44 43 43

Month	Second- foot-days	Maximum	Kinimun	Mean	Run-off in acre-feet
October	1,531 1,428 1,287	51 51 45	49 45 38	49.4 47.6 41.5	3,040 2,830 2,550
Calendar year 1936	28,035	317	25	76.6	55,620
January. February March. April May June July July August September.	869 761 869 3,038 3,437 2,441	38 37 25 36 172 151 97 69 51	33 25 24 26 34 97 69 53 43	36.4 31.0 24.5 29.0 98.0 115 78.7 60.6 47.4	2,240 1,720 1,510 1,720 6,030 6,820 4,840 3,720 2,820
Water year 1936-37	20,089	172	24	55.0	39,840
	1-			1	ı

Henrys Lake near Lake. Idaho

Location.- Staff gage, lat. $44^{\circ}36^{\circ}$, long. $111^{\circ}21^{\circ}$, in SW2 sec. 26, T. 15 N., R. 43 E., at dam 4 miles south of Lake post office.

Records available .- July 1923 to September 1937.

Remarks.- Contents July 1 to Sept. 30 computed from inflow-outflow records because of drawdown at gage. Henrys Lake impounds water for supplemental irrigation of lands served by several canals diverting from Henrys Fork. It has a capacity of 60,000 acre-feet between elevations 6,458 and 6,473 feet, respectively, above mean sea level. Gates in dam closed Oct. 8 to June 25. Gage-height record and capacity table furnished by North Fork Reservoir Co.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	1111							-	=	30,496 30,333 30,176 30,004 29,493	17,932 17,330 16,740 16,160 15,590	4,060 3,890 3,710 3,590 3,580
6 7 8 9 10	8,685							-	26,964 -	28,815 28,140 27,474 26,812 26,267	15,160 14,750 14,340 13,930 13,530	3,570 3,560 3,550 3,540 3,530
11 12 13 14 15	-							23,252	- - -	26,077 25,942 25,787 25,632 25,479	13,130 12,740 12,360 11,950 11,540	3,530 3,530 3,530 3,530 3,450
16 17 18 19 20	1111							- - -	29,801	25,328 25,177 25,024 24,885 24,746	11,130 10,610 9,950 9,300 8,690	3,270 3,100 2,940 2,790 2,660
21 22 25 24 25								= =	- - - 30,550	24,538 24,098 23,575 22,977 22,322	8,100 7,490 6,920 6,490 6,080	2,540 2,430 2,330 2,27 2,130
26 27 28 29 30 31					•			- - -	30,550 30,550 30,550 30,550 30,550	21,680 21,032 20,394 19,769 19,155 18,545	5,700 5,360 5,070 4,500 4,560 4,250	2,040 1,950 1,860 1,750 1,700

Note -- Readings discontinued during periods for which no records are given.

Henrys Fork near Lake, Idaho

Location.- Water-stage recorder, lat. $44^\circ36^\circ$, long. $111^\circ21^\circ$, in SW\frac{1}{2} sec. 26, T. 15 N., R. 43° E., a quarter of a mile below Henrys Lake dam and 4 miles south of Lake.

Drainage area. - 104 square miles (including basin of Dry Creek).

Records available. May 1920 to September 1937. Prior to September 1922 at point 3 miles downstream and below mouth of Dry Creek, whose flood waters have been diverted into Henrys Lake since 1923.

Extremes.- Maximum daily discharge during year, 351 second-feet July 5; minimum, about 2 second-feet during October to May (leakage through gates).
1920-37: Maximum discharge, 907 second-feet June 13, 1926 (gage height, 5.40 feet); minimum, 1 second-foot at times, when reservoir gates were closed.

Remarks. - Records good. Discharge for Oct. 9 to June 29, Sept. 8-9, 11-13, computed on basis of one discharge measurement and observers notes. Flow controlled by operation of Henrys Lake gates, which were closed Oct. 8 to June 25.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	17 17 17 17 17								3 3 3 3 3	92 89 97 267 351	301 296 292 283 216	86 87 56 9
6 7 8 9 10	17 17 10 2 2								3 3 3 3 3	349 345 343 283 104	203 202 202 198 198	9 9 8 7 5
11 12 13 14 15	88888								3 3 3 3 3	76 76 76 75 74	196 191 202 206 203	5 5 5 43 90
16 17 18 19 20	2 2 2 2 2								4 4 4 4 4	74 70 68 68 108	259 334 321 297 292	85 80 74 69 64
21 22 23 24 25	88888								4 4 4 4 8	219 261 299 328 326	301 281 208 200 182	59 54 53 51 50
26 27 28 29 30 31	0 0 0 0 0 0 0								10 10 10 10 48	326 326 319 312 305 306	163 145 129 113 98 89	48 46 44 43 41
-				<u> </u>			' 	' - T	<u> </u>	1		

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	175 60 62	17 - -	2	5.6 2 2	347 119 123
Calendar year					
January. February March. April May June July August September.	62 56 62 60 77 177 6,412 6,801 1,294	- - - 48 351 334	- - 3 68 89	2 2 2 2.5 5.9 207 219 43.1	123 111 123 119 154 351 12,720 13,490 2,570
Water year 1936-37	15,298	351	2	41.9	30,350

HENRYS FORK BASIN

Henrys Fork near Island Park, Idaho.

Location.- Water-stage recorder, lat. $44^{\circ}25^{\circ}$, long. $111^{\circ}24^{\circ}$, in $SW_{\frac{1}{4}}$ sec. 28, T. 13 N., R. 43 E., an eighth of a mile above mouth of Buffalo River, an eighth of a mile below Island Park dam, and 2 miles west of Island Park.

Records available. - January 1933 to September 1937.

Extremes. - Maximum discharge during year, 1,590 second-feet May 9 (gage height, 6.08 feet); minimum, 312 second-feet Jan. 20 (gage height 3.60 feet).
1933-37: Maximum discharge, that of May 9, 1937; minimum, 168 second-feet Feb. 17, 1936 (gage height 3.19 feet).

Remarks.- Records good. Flow regulated by storage in Henrys Lake. Cofferdam at Island
Park damsite completed and water turned through diversion tunnel June 7, 1937, as a
result of which some additional regulation became effective.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	394	*374	†367	354	354	354	344	545	598	448	704	456
	390	*374	365	372	358	358	348	660	576	489	735	452
	394	*374	*360	362	35e	348	334	830	562	493	704	444
	394	376	*360	337	354	348	334	841	571	497	684	412
	394	376	*360	330	362	348	337	880	†530	580	679	401
6	390	379	*360	†333	362	348	340	941	489	714	631	394
7	387	372	337	†337	354	348	334	997	459	761	612	390
8	387	354	337	†340	351	348	337	1,130	463	761	558	351
9	†388	362	334	†344	344	348	334	1,450	497	756	598	348
10	390	372	†345	†348	344	351	334	1,340	528	745	584	387
11	387	372	355	351	344	344	348	1,100	549	589	571	383
12	387	372	348	348	354	344	344	880	617	524	576	383
15	387	372	*360	340	348	348	348	803	704	497	545	387
14	383	372	*365	354	354	348	344	793	665	482	541	376
15	383	369	366	354	340	344	351	803	636	485	558	383
16	387	372	372	365	340	354	369	e03	576	516	545	412
17	383	369	365	362	344	348	362	803	558	485	612	419
18	383	369	358	365	344	354	365	e47	545	474	626	419
19	390	369	358	337	344	351	383	885	520	463	650	419
20	390	369	358	312	365	351	397	880	516	470	694	430
21	383	372	365	344	354	351	405	820	497	501	684	433
22	379	376	365	365	348	354	430	750	493	549	670	430
23	379	376	362	372	351	354	415	740	482	660	650	452
24	383	372	365	372	354	351	401	730	470	684	60 7	444
25	383	372	365	365	358	351	412	†715	463	694	580	426
26 27 28 29 30 31	379 376 365 369 369 372	372 372 372 369 369	362 372 358 372 372 365	365 369 365 362 362 354	358 358 358 - -	344 337 337 337 340 337	482 562 589 520 512	†700 †685 670 645 612 594	452 444 433 423 419	735 756 735 709 689 709	566 545 528 512 508 478	415 412 405 401 401

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in aore-feet
October	11,905 11,140 11,153	394 379 372	365 354 334	384 371 360	23,610 22,100 22,120
Calendar year1936	165,893	1,350	261	453	329,000
January February Harch April Hay Jun Jun Jul August September	10,940 9,857 10,778 11,715 25,672 15,735 18,650 18,735 12,265	372 362 358 589 1,450 704 761 735 456	312 340 337 334 545 419 448 478 348	353 352 348 390 835 524 602 604 409	21,700 19,550 21,380 23,240 51,320 31,210 36,990 37,160 24,330
Water year 1936-37	168,745	1,450	312	462	334,700

*Discharge estimated. †Discharge interpolated.

Henrys Fork at Warm River. Idaho.

Location. - Water-stage recorder, lat. 44°07', long. lll°20', in sec. 12, T. 9 N., R. 43 E., 1,000 feet above mouth of Warm River and half a mile from Warm River railroad station.

Drainage area .- 660 square miles.

Records available .- September 1910 to March 1915 and April 1918 to Sept. 1937,

Average discharge. - 23 years (1911-14, 1919-37), 1,000 second-feet.

Extremes. - Maximum discharge during year, 2,040 second-feet May 9 (gage height, 5.95 feet); minimum, 501 second-feet Jan. 6 (gage height, 3.66 feet).
1910-15; 1918-37: Maximum discharge, 3,540 second-feet May 18, 1927 (gage height, 7.55 feet); minimum, 421 second-feet Dec. 16, 1931 (gage height, 3.45 feet).

Remarks.- Records good except those for periods of ice effect or missing gage heights, Nov. 1-17, Nov. 30 to Mar. 8, which were computed on basis of two discharge measurements, twice weekly gage heights, weather records and comparison with records for station at Ashton, and are fair. Discharge interpolated Mar. 13, 25, 28, 29, May 15-18, 23-25, May 30 to June 1, and June 3, 4. Flow regulated by storage in Henrys Lake, about 60 miles upstream. Some water diverted above station for irrigation of wild-hay meadows.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	729 735 7 29 735 741	690	656 656 650 645 672			701 701 701 701 702	689 729 672 656 667	938 1,030 1,250 1,460 1,570	1,070 1,050 1,040 1,020 1,010	806 549 874 874 905	1,110 1,070 1,080 1,060 1,040	843 824 e12 e31 788
6 7 8 9 10	735 729 729 735 7 35	500	680 680 680 706 685		640	704 706 690 684 701	672 662 656 656 662	1,610 1,600 1,830 1,950 1,880	950 924 868 935 9e3	1,060 1,100 1,110 1,120 1,120	1,020 976 957 924 957	747 741 747 741 735
11 12 13 14 15	729 724 72 4 724 724	662 670 680 684 684	670 656 656 656 683		764 735	724 712 706 701 701	667 678 678 695 689	1,750 1,520 1,410 1,370 1,380	983 1,130 1,230 1,150 1,080	1,050 918 886 861	944 924 924 899 899	735 735 7 29 735 724
16 17 18 19 20	718 724 718 729 741	684 684 689 689	680 680 678 664 650		706 712 718 724 730	701 701 695 6e9 684	712 701 701 718 741	1,390 1,400 1,410 1,420 1,410	1,040 1,000 990 964 944	861 874 843 837 837	912 950 976 990 1,010	753 776 776 762 794
21 22 25 24 25	729 724 724 724 724	684 689 689 689 689	670 6e9		736 742 747 747 776	67e 684 689 684 678	753 e00 776 759 764	1,370 1,300 1,280 1,260 1,230	924 899 880 680 861	861 905 964 1,050 1,050	1,040 1,020 1,010 983 938	824 800 849 837 806
26 27 28 29 50 31	718 724 718 712 715 718	678 684 689 656 656	680		735 735 701 -	672 662 665 668 672 6 7 8	849 970 1,050 990 931	1,210 1,200 1,100 1,160 1,130 1,100	549 837 824 512 512	1,050 1,100 1,080 1,080 1,060 1,040	918 905 899 880 874 861	788 776 770 764 764

Month	Second- foot-days	Maximm	Minimum	Mean	Run-off in aore-feet
October	22,520 20,513 20,862	741 - -	712	726 684 673	44,670 40,690 41,380
Calendar year 1936	298,479	2,060	607	S16	592,000
January. February March. April. May. June June July August September.	19,328 21,435 22,343 42,998 26,942	776 724 1,050 1,950 1,230 1,120 1,110 849	662 656 938 812 606 561 724	640 690 691 745 1,387 965 964 966 778	39,350 38,340 42,520 44,320 85,290 57,410 59,280 59,400 46,270
Water year 1936-37	301,943	1,950	-	827	598,900

Henrys Fork mear Ashton, Idaho.

Location. - Water-stage recorder, lat. 44°05', long. 111°30', in sec. 28, T. 9 N., R. 42 E., a quarter of a mile below power plant and 3 miles west of Ashton.

Drainage area. - 1,030 square miles.

Records available .- August 1902 to June 1909 and April 1920 to September 1937.

Average discharge. - 18 years (1904-08, 1925-37), 1,300 second-feet.

Extremes. - Maximum discharge during year, 2,920 second-feet May 9 (gage height, 6.96 feet); minimum, 247 second-feet Apr. 9 (gage height, 5.10 feet); minimum daily discharge, 654 second-feet Nov. 3.
1902-09, 1920-37: Maximum discharge, 6,220 second-feet May 7, 1925; minimum, 65 second-feet Oct. 16, 1935 (gage height, 4.59 feet); minimum daily discharge, 440 second-feet Dec. 5, 1931.

Remarks. - Records good. Flow regulated at power plant above station and by storage in Henrys Lake. No diversions above station except those for irrigation of meadows on headwaters.

Discharge, in second-feet, water year October 1936 to September1937

Дау	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	958	949	923	802	949	962	955	1,260	1,560	1,080	1,200	1,080
2	975	1,010	898	790	949	1,010	1,040	1,400	1,500	1,110	1,190	1,070
3	975	732	923	814	962	1,000	949	1,790	1,420	1,120	1,370	1,040
4	1,000	898	814	862	988	1,000	910	2,080	1,500	1,130	1,340	1,080
5	1,000	1,080	910	838	988	975	943	2,300	1,430	1,160	1,310	1,050
6	1,010	1,010	949	838	988	1,000	930	2,350	1,350	1,380	1,320	975
7	1,000	1,010	1,050	654	962	975	949	2,350	1,250	1,420	1,250	975
8	1,000	910	975	814	949	975	876	2,720	1,230	1,400	1,220	962
9	1,000	949	988	874	910	975	1,010	2,920	1,290	1,420	1,100	949
10	1,010	936	874	936	936	975	875	2,850	1,370	1,420	1,230	949
11 12 13 14 15	1,000 1,000 988 988 975	1,000 1,010 949 949 949	886 1,000 826 898 1,010	936 898 936 949	975 988 1,000 1,010 923	975 975 975 958 967	984 971 967 1,010 1,050	2,760 2,370 2,260 2,180 2,220	1,340 1,670 1,910 1,670 1,530	1,370 1,220 1,180 1,160 1,160	1,200 1,290 1,280 1,260 1,250	962 936 949 936 949
16	975	962	1,040	936	886	980	1,060	2,320	1,480	1,160	1,250	949
17	975	962	962	923	923	980	1,120	2,410	1,420	1,150	1,230	988
18	962	962	949	949	949	954	1,030	2,100	1,420	1,110	1,230	1,000
19	975	949	949	936	923	955	1,110	2,200	1,370	1,090	1,230	1,000
20	962	949	923	744	850	952	1,120	2,180	1,320	1,130	1,230	988
21	949	949	936	850	838	931	1,150	2,080	1,280	1,230	1,290	1,010
22	962	936	936	698	936	924	1,160	2,180	1,250	1,280	1,290	1,000
25	962	936	936	975	988	940	1,130	1,850	1,220	1,220	1,280	1,010
24	962	936	936	975	988	928	1,080	1,910	1,180	1,260	1,230	1,010
25	962	936	949	988	988	912	1,080	1,870	1,160	1,310	1,190	1,000
26 27 28 29 50 31	962 923 962 962 962 962	949 936 923 923 923	975 949 962 826 838 910	949 949 975 975 975 923	975 975 962 -	907 1,000 905 845 862 988	1,200 1,400 1,480 1,380 1,250	1,780 1,720 1,740 1,630 1,560 1,560	1,150 1,110 1,050 1,050 1,090	1,320 1,380 1,380 1,380 1,370 1,350	1,160 1,130 1,120 1,130 1,120 1,110	1,000 975 988 988 975

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October Nevember December	30,288 28,472 28,900	1,010 1,080 1,050	923 732 814	977 949 932	60,080 56,470 57,320
Calendar year 1936	420,614	3,170	622	1,150	834,300
January. February Barch. April May Jun	27,759 26,658 29,660 32,171 64,900 40,600 38,850 38,130 29,743	988 1,010 1,010 1,480 2,920 1,910 1,420 1,370 1,080	654 838 845 875 1,260 1,050 1,080 1,110 936	895 952 954 1,072 2,094 1,353 1,253 1,253 991	55,060 52,880 58,830 63,810 128,700 80,530 77,060 75,630 58,990
Water year 1936-37	416,131	2,920	654	1,140	825,400

Diversions from Henrys Fork between Ashton and St. Anthony gaging stations, Idaho

Between Ashton and St. Anthony stations six canals divert water from Henrys Fork for irrigation. Records available for part of each irrigation season from 1919 to 1937.

Records of discharge of canals computed from daily readings of staff gage and combined to show total flow. Records good.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Qot.	Now.	Dec.	Jan.	Feb.	Mar.	Ap	r.	Nay	June	July	Aug.	Sept.
1 2 3 4 5									785 819 898 930 974	1,090 1,020 1,080 1,100 1,120	824 813 846 829 877	70 65 66 67	5 406 B 392 6 381
6 7 8 9									968 969 1,020 1,050 1,050	980 975 1,060 1,120 1,120	850 789 761 632 627	66 61 62 62 61	370 1 369 0 363
11 12 13 14 15									1,040 1,000 1,060 1,070 1,110	1,090 1,040 776 625 656	617 595 633 631 628	61 63 61 58 57	6 367 9 350 8 333
16 17 18 19 20									1,140 1,090 1,190 1,220 1,240	730 795 790 792 886	627 678 692 703 760	57 5 0 54 53 52	6 359 2 359 3 359
21 22 23 24 25									1,190 1,310 1,270 1,300 1,300	960 1,110 1,060 1,140 1,180	841 827 822 823 820	52 50 50 50 49	6 371 2 371 0 371
26 27 28 29 30 31					=				1,300 1,330 1,300 1,300 1,230 1,210	1,180 1,170 877 835 864	829 845 833 817 815 754	48 47 47 47 48 48	1 373 3 373 6 376 2 376
	,	1	onth.			Second foot-de		Ma	ximum	Minimus	Mea		Run-off in more-feet
NoA	October												
	Calendar year												
Mar Apr May Jun Jul Aug	January Pebruary March April May June July August September				34,6 29,2 23,4 17,6 11,1	569		1,330 1,180 877 701 463	785 625 595 457 328		118 974 756 570 371	68,750 57,960 46,490 35,050 22,070	
T	The period												2 3 0,300

Henrys Fork at St. Anthony, Idaho

Location.- Water-stage recorder, lat. 43°58', long. lll°41', in sec. 1, T. 7 N., R. 40 E., half a mile upstream from bridge on main street of St. Anthony.

Records available. - March 1919 to September 1937 (irrigation seasons only).

Extremes.- Maximum discharge observed during year, 4,640 second-feet May 9 (gage height, 5.08 feet); minimum daily discharge, 570 second-feet July 5 (gage height, 2.96 feet).

1919-37: Maximum observed discharge, 9,030 second-feet May 8, 1925 (gage height, 6.70 feet); minimum daily discharge 413 second-feet July 22, 1931 (gage height, 2.76 feet).

Remarks.- Records good. Diversions for irrigation above station. Flow regulated by Utah Power & Light Co's dam, 17 miles upstream, and by storage in Henrys Lake.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1-9)

2.9	524
3.1	684
3.3	890
3.5	1,145
3.7	1,420
3.9	1,745
4.1	2,130
4.3	2,560
4.5	3,050
4.7	3,570
4.9	4,120
5.1	4,700

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	How.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	666 738 810 810 829							952 1,080 1,510 2,050 2,520	1,590	751 722 606 600 570	667 634 694 703 684	780 846 915 928 940
6 7 8 9 10	838 838 829 838							2,680 2,660 3,470 4,260 4,060	1,530 1,270 1,090 1,160 1,410	824 1,000 990 1,020 1,050	667 642 625 592 642	890 846 813 857 857
11 12 13 14 15	1111							4,240 3,650 3,790 3,600 3,570	1,500 2,630 3,840 3,150 2,560	1,000 824 742 694 722	642 703 915 952 965	846 846 846 846 846
16 17 18 19 20	-							3,620 3,600 3,470 3,410 3,340	2,410 2,580 2,580 2,050 2,260	694 713 659 642 577	890 879 824 770 791	835 835 869 928 928
21 22 23 24 25	-							2,850 2,490 2,540 2,880 2,900	2,520 2,580 2,560 1,640 1,080	585 634 577 600 676	879 879 868 868 835	990 1,020 1,000 1,080 990
26 27 28 29 50 31		!						2,880 2,700 2,950 2,950 2,520 2,050	742 600 642 650 703	659 642 650 650 667 676	824 813 802 791 770 780	965 940 928 868 868

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1-9	7,196	838	666	800	14,270
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year					
January					
February					
March					
April	07 040	4 000	952	0.04%	181.000
May	91,242	4,260	600	2,943 1.828	108,800
June	54,847	3,840		723	44,470
July	22,418	1,050	570		
August	23,990	965	592	774	47,580
September	26,945	1,080	780	898	53,440
Water year					

Diversions from Henrys Fork between St. Anthony and Rexburg gaging stations, Idaho

Between St. Anthony and Rexburg gaging stations four canals divert water from Henrys Fork for irrigation. Records available for part of each irrigation season from 1919 to 1937.

Records of discharge of canals are computed from daily readings of staff gage and combined to show total flow. Records good.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	_							781 813 873 830 614	1,060 1,020 1,060 1,060 962	701 647 574 668 624	665 634 632 705 654	406 409 412 411 410
6 7 8 9 10			•					515 885 914 931 928	933 944 962 898 820	609 746 731 692 690	685 666 621 580 638	449 457 486 481 475
11 12 13 14 15		l						942 941 974 965 1,000	694 780 632 632 641	691 667 728 648 621	602 605 648 646 648	476 477 476 429 422
16 17 18 19 20								1,040 1,030 1,100 1,120 1,130	683 751 722 728 751	615 610 635 660 612	634 643 563 557 547	372 375 379 383 388
21 22 25 24 25								1,120 1,160 1,190 1,210 1,210	848 883 910 871 909	605 631 621 639 679	567 567 557 537 483	380 372 371 371 370
26 27 28 29 30 31								1,190 1,180 1,220 1,210 1,140 1,080	847 629 637 629 762	694 705 705 702 698 694	487 525 529 528 524 520	369 293 293 2 71 271

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in aore-feet	
October						
Calendar year	·					
January. February Karch. April Kay June July	31,536 24,858 20,542	1,220 1,060 746 705	614 629 574 483	1,017 829 663 594	62,550 49,300 40,740 36,500	
September	11,934	486	271	398	23,670	
The period					212,800	

HENRYS FORK BASIN

Henrys Fork near Rexburg, Idaho

Location. - Water-stage recorder, lat. 43°50', long. 111°54', in sec. 30, T. 6 N., R. 39 E., just below highway bridge 7 miles west of Rexburg and below all tributaries.

Drainage area. - 3,010 square miles.

Records available. - April 1909 to September 1937.

Extremes. - Maximum discharge during year 4,040 second-feet June 14 (gage height, 6.97 feet); minimum, 363 second-feet July 29 (gage height, 2.21 feet).

1909-37: Maximum discharge, 9,490 second-feet June 29, 1927 (gage height, 9.90 feet): minimum, 183 second-feet March 24-28, 1934 (gage height, 1.45 feet).

Remarks.- Records good except those for periods of ice effect, Nov. 3, 4, 9-15, Dec. 5-10, 13-19, Jan. 3 to March 17, which were estimated and are fair. Discharge interpolated March 21, 26, Aug. 2-6. Flow regulated by operation of power plant at Ashton and by storage in Henrys Lake. Diversions for irrigation above station. No diversions from Henrys Fork below station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	600 630 720 797 819	1,450 1,430 1,460 1,490 1,530	1,260 1,280 1,270 1,280	1,320 1,350			1,490 1,600 1,600 1,510 1,380	868 770 890 1,290 1,810	1,900 1,650 1,420 1,340 1,650	534 544 521 512 516	391 391 391 391 391	600 680 765 786 819
6 7 8 9 10	941 868 890 907 918	1,630 1,620 1,640 1,600 1,600	1,300			1,350	1,420 1,420 1,410 1,360 1,400	2,160 2,190 2,320 3,040 3,620	1,480 1,250 1,000 902 1,060	548 710 863 934 1,020	391 391 379 375 367	792 735 715 670 690
11 12 13 14 15	907 858 952 508 792	1,600 1,600 1,560 1,520 1,480	1,310				1,340 1,370 1,360 1,310 1,440	3,660 3,680 3,300 3,250 3,080	1,260 1,450 2,950 3,990 3,680	1,040 912 745 665 670	379 371 426 534 570	690 685 685 715 715
16 17 18 19 20	819 976 1,070 1,130 1,220	1,440 1,390 1,370 1,350 1,310	1,380	1,350		1,650 1,590 1,600	1,490 1,600 1,470 1,330 1,290	3,190 3,190 3,200 3,100 3,170	3,080 2,690 2,900 2,670 2,240	695 715 645 544 480	570 530 548 530 534	710 720 740 750 775
21 22 23 24 25	1,250 1,260 1,290 1,290 1,380	1,280 1,280 1,280 1,270 1,290	1,390 1,390 1,360 1,350 1,330			1,540 1,470 1,470 1,470 1,470	1,270 1,230 1,260 1,110 952	3,050 2,470 2,020 2,060 2,260	2,300 2,320 2,360 2,090 1,320	431 404 387 371 371	570 620 630 635 625	802 868 852 946 1,010
26 27 28 29 30 31	1,420 1,420 1,440 1,470 1,440 1,470	1,290 1,280 1,260 1,230 1,250	1,360 1,410 1,420 1,310 1,270 1,260			1,420 1,360 1,450 1,390 1,370 1,380	907 994 1,170 1,250 1,070	2,360 3,280 2,210 2,490 2,500 2,170	836 660 600 562 539	367 367 367 363 367 375	630 615 590 580 585 580	994 982 958 952 896

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	32,552 42,780 41,370	1,470 1,640	1,230	1,050 1,426 1,335	64,570 84,850 92,060
Calendar year 1936	574,517	5,640	422	1,570	1,140,000
January February March March March Myrii May June June Myr May	41,820 37,800 43,580 39,803 77,648 54,149 17,983 15,510 23,697	1,600 3,680 3,990 1,040 635 1,010	907 770 539 363 367 600	1,349 1,350 1,406 1,327 2,505 1,605 580 500 790	82,950 74,980 86,440 78,950 154,000 107,400 35,670 30,760 47,000
Water year 1936-37	468,692	3,990	363	1,284	929,600

Diversions from Fall River above gaging station near Squirrel, Idaho

Above Squirrel gaging station three canals divert water from Fall River for irrigation. Records available for part of each irrigation season during 1919-1937.

Discharge of canals computed from daily staff-gage reading and results combined to show total diversion. Records good.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5								0 0 0 0	114 123 123 150 153	0 0 81 81	70 69 68 68 68	
6 7 8 9								0 0 0 0	136 152 161 169 178	81 82 82 82 82	76 76 76 0	
11 12 13 14 15								0 0 0 0	177 179 139 108 104	82 82 84 83 84	0 0 0 0	
16 17 18 19 20								0 0 0	106 92 111 111 124	0 0 0 0	75 76 75 65 0	
21 22 23 24 25					<u>.</u>			0 4 4 46 29	159 175 189 197 207	0 0 0	0 0 0 0	
26 27 28 29 30 31								58 71 71 90 95 106	216 236 0 199 199	0 68 53 68 66 68	0 0 0 0	
-	<u> </u>							`т	<u> </u>		100	

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
Calendar year					
January February March April May June June July August September	574 4,487 1,309 862 0	106 236 84 76 0	0 0 0 0	18.5 150 42.2 27.8	1,140 8,900 2,600 1,710
The period					14,350

Fall River near Squirrel, Idaho

Location. - Staff gage, lat. 44°04', long. lll°15', in sec. 34, T. 9 N., R. 44 E., 4 miles northeast of Squirrel.

Drainage area. - 380 square miles.

Records available. - January 1904 to June 1909, May 1918 to September 1937. August 1902 to December 1903, at Wilson's sawmill 3 miles upstream.

Average discharge. - 19 years (1919-37), 729 second-feet.

Extremes.- Maximum discharge observed during year, 3,010 second-feet June 23 (gage height, 4,24 feet); minimum, 265 second-feet Jan, 6 (gage height, 1.72 feet). 1904-9, 1918-37: Maximum observed discharge, 6,440 second-feet June 27, 1927; minimum, 72 second-feet Feb. 9, 1930.

Remarks. - Records good except those for periods of ice effect, Dec. 16-31, Jan. 1, 4, 5, 10-31, Feb. 1 to Mar. 10, which were estimated and are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge in second-feet)

(Shifting-control method used Oct. 1 to Mar. 10)

1.6	3.05	0.0	200
	185	2.6	900
1.8	285	3.0	1,320
2.0	400	3.5	1,940
2.2	550	4.0	2,650
2.4	715	4.3	3.100

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oot.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	478 478 478 478 463	486 486 486 486 486	456 456 456 456 456	400 382 400 380 350		365	364 400 400 352 364	502 534 684 862 940	1,650 1,500 1,760 2,320 1,760	524 562 724 769 698	598 502 486 478 470	456 456 449 486 478
6 7 8 9 10	463 449 449 449 442	486 486 486 470 470	453 450 447 444 442	265 340 307 352			364 364 364 364 376	960 1,040 1,390 1,580 1,730	1,550 1,410 1,430 1,600 1,600	920 733 698 664 690	456 442 442 510 502	456 456 470 456 442
11 12 13 14 16	442 470 470 470 442	463 463 456 463 463	428 394 388 449 414			376 376 376 376 376	400 370 376 388 428	1,710 1,990 1,940 2,100 2,380	1,780 2,950 2,770 1,910 1,860	664 630 622 614 630	502 502 502 502 502	442 442 442 435 428
16 17 18 19 20	502 502 502 534 518	463 470 456 456 456		375	*3 65	376 376 376 376 376	435 407 407 428 435	2,470 2,410 2,560 2,530 2,290	1,860 2,470 1,810 1,860 2,290	672 656 647 638 630	394 400 400 400 470	428 428 428 428 428
21 22 23 24 25	502 486 502 502 494	456 456 456 456 428	420			376 364 376 376 352	442 470 435 407 428	2,020 1,890 2,210 2,560 2,680	2,590 2,950 3,010 1,990 1,490	598 598 598 590 582	470 463 463 456 456	518 470 534 534 502
26 27 28 29 30 31	486 486 478 470 486 486	428 428 428 442 456				364 364 364 352 364 364	502 502 542 534 502	2,680 2,440 2,890 2,770 2,290 1,940	1,380 1,130 824 881 980	574 502 502 494 478 550	449 449 449 456 470 470	470 470 456 442 442

<u> </u>					
Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
Cotober	14,857 13,871 13,309	534 486 456	442 428 388	479 462 429	29,470 27,510 26,400
Calendar year 1936	290,063	4,040	-	793	575,300
January February March April May June July August September	10,220 11,426 12,550 58,972 55,365	542 2,890 3,010 920 598 534	265 - - 352 502 824 478 394 428	369 365 369 418 1,902 1,846 647 468 459	22,660 20,270 22,660 24,890 117,000 109,800 39,770 28,780 27,320
Water year 1936-37	250,330	3,010	265	68 6	496,500

*Discharge measurement.

Diversions from Fall River between Squirrel and Chester gaging stations, Idaho

Between Squirrel and Chester gaging stations nine canals divert water from Fall Records available for part of each irrigation season during 1919-57.

Discharge of canals computed from daily staff-gage readings and results combined to show total diversion. Records good.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 5								40	708	429	511	367
2		1			l	1		40	623	429	499	228
- 5						ŀ		40	719	486	490	228
4					1			40	S31	491	481	317
5								40	838	486	472	317
6								45	853	465	469	316
7		l .						90	796	554	447	314
8		l .			l	!		51.	817	535	445	. 309
9		l			i	1		64	S22	520	510	257
10					į			134	S23	527	504	272
11 12		İ				l		129	852	527	495	230
12		ļ			l	į.		139	862	526	228	230
13		1			l	i		168	597	524	231	247
14					l	1 :		419	588	525	215	258
15								447	544	530	217	273
16								461	571	526	214	287
17					l			468	612	482	236	196
18		l :			l			486	666	487	364	198
19		1			l			465	715	493	371	200
50					ŀ			505	747	481	392	207
21		i						507	771	494	392	207
21 22		1			l	1		583	825	510	379	207
23					1			670	802	553	381	190
24		1			ŀ	1		693	803	554	352	190
25						i		699	798	553	354	204
00					l			716	798	525	355	214
26 27		i				l		735	779	512	361	215
28		l			ł	l	1	763	677	502	380	215 217
29		l			1			797	577	484	382	297
30		ļ			Į.		l	787	600	530	386	297
31		1				l	l	728	•	525	368	-
		1	1		I	I	l	1 720		020	1 500	

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
Calendar year					
January. February Rarch April May Jun May Jun September.	11,949 22,014 15,765 11,881 7,489	797 862 554 511 367	40 544 429 214 190	385 734 509 383 250	23,700 43,660 31,270 23,570 14,850
The period					137,000

Fall River near Chester, Idaho

Location.- Water-stage recorder, lat. 44° 01', long. lll°34', in sec. 13, T. 8 N., R. $\overline{41~E.}$, half a mile above mouth and 2 miles north of Chester.

Records available. - April 1920 to September 1937 (irrigation seasons only).

Extremes. - Maximum discharge recorded during year, 2,620 second-feet June 13 (gage height, 4.27 feet); minimum, 10 second-feet Aug. 4 (gage height, 0.70 foot). 1920-37: Maximum discharge, 6,380 second-feet June 27, 1927 (gage height, 6.60 feet); minimum, 9 second-feet Aug. 7, 1923 (gage height, 1.01 feet).

Remarks. - Records good. Discharge for May 10, 17-19, 21, 30 interpolated. No records Oct. 25 to Apr. 30. Station below all irrigation diversions from Fall River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Ap	r.	May	June	July	Aug	. Sept.
1 2 3 4 5	415 393 360 344 329								420 506 715 921 1,170	1,320 1,260 1,210 1,550 1,340	426 371 298 298 211		58 129 56 189 35 249 10 229 24 21
6 7 8 9 10	344 339 339 355 234								1,220 1,250 1,770 2,310 2,260	1,070 867 806 912 1,090	268 298 224 196 199		16 20' 16 199 16 199 29 22- 19 23
11 12 13 14 15	288 283 393 324 329								2,220 2,070 2,350 2,250 2,310	1,150 1,830 2,440 1,860 1,570	180 147 137 128 147	2 2	21 220 42 230 93 230 93 210 93 21
16 17 18 19 20	329 288 268 313 355								2,300 2,270 2,240 2,200 2,170	1,520 1,830 1,770 1,450 1,730	172 165 1 69 1 7 2 147	1	11 199 99 200 94 220 70 249 30 249
21 22 23 24 25	344 334 329 334					,			1,900 1,620 1,850 2,090 2,130	2,060 2,180 2,150 1,360 885	128 92 80 70 56	1	96 31: 98 32: 10 35: 08 39: 16 31:
26 27 28 29 30 31	11111								2,130 2,070 2,070 2,410 1,960 1,510	572 470 482 371 382	46 31 37 43 36 52	1 1 1 1	10 288 16 273 08 243 05 190 05 193
)	onth.			Second foot-de		Max	imm	Minimum	Mea	n	Run-off i
Nov	ember					8,	063		415 - -	26	3 3	36	15,990 - -
1	Calendar year			• • • • • • • • •									
Mar Apr May Jun Jul Aug	anuary bornary arch pril my une uly ugust		3,	662 487 024 088 213		2,410 2,440 426 293 398	42/ 37/ 3/ 1/ 12/	1,3	28 16 62 99.6 40	112,40 78,32 9,96 6,12 14,31			

Water year

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Teton River near St. Anthony, Idaho

Location. - Water-stage recorder, lat. 43°56', long. 111°37', in sec. 15, T. 7 N., R. 41 E., half a mile above railroad bridge and 4 miles southeast of St. Anthony.

Drainage area. - 920 square miles.

Records available .- April 1903 to June 1909, April 1920 to September 1937.

Extremes.- Maximum discharge during year, 2,020 second-feet May 19 (gage height, 4.53 feet); minimum observed, 273 second-feet Feb. 18 (discharge measurement during period of ice effect).

1903-9, 1920-37: Maximum discharge, 7,820 second-feet (gage height, 6.90 feet, former site and datum) June 5, 1909; minimum, 88 second-feet March 12, 1906 (gage height, 1.00 foot, former site and datum).

Remarks. - Records excellent except those for periods of ice effect, Nov. 27 to Dec. 17, Jan. 2 to Mar. 8 which were computed on basis of two discharge measurements, and weather records and are fair. Flow affected by diversions in Teton Basin 20 miles upstream and by water discharged at times since 1931 by Fall River through Enterprise Canal into Teton River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	464 468 473 473 482	438 429 386 455 460		345 - - -		300	378 420 438 412 399	552 589 621 645 699	1,020 945 1,020 1,140 1,000	861 814 793 772 762	655 603 566 552 534	425 416 416 486 526
6 7 8 9 10	490 473 468 464 464	433 429 412 403 408	300	11111		361 361 361	395 391 382 395 446	772 809 897 1,040 1,060	897 837 831 897 945	814 837 788 891 843	534 530 539 552 562	512 504 504 521 473
11 12 13 14 15	460 460 460 460 464	416 412 408 399 403	*292 300	11111		365 378 382 382 386	521 512 508 664 945	1,040 1,000 1,040 1,120 1,400	945 1,090 1,360 1,340 1,220	767 715 694 740 867	562 517 486 477 477	420 408 403 399 395
16 17 18 19 20	473 473 473 477 508	403 408 408 395 391	320 330 353 353 341	*317 -	* 273	399 412 412 403 386	1,320 990 861 843 891	1,440 1,430 1,730 1,930 1,700	1,170 1,260 1,230 1,090 1,130	849 730 689 689 694	468 460 464 508 544	391 391 386 378 378
21 22 23 24 25	495 473 464 464 442	391 395 382 365 374	357 357 345 345 353	11111		382 370 378 370 353	885 927 7 3 6 607 589	1,340 1,240 1,420 1,620 1,640	1,360 1,520 1,690 1,400 1,120	650 631 621 631 621	552 548 539 526 526	391 412 416 451 425
26 27 28 29 30 31	433 433 429 420 420 438	365 350	353 341 349 332 353 353 336			353 353 357 357 357 361	700 772 705 650 580	1,620 1,580 1,740 1,740 1,440 1,140	1,030 984 927 903 891	645 694 664 659 593 626	477 438 429 429 429 429	412 403 399 395 395

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October November December	14,338 11,968 10,010	508 460 357	420 -	463 399 323	28,440 23,740 19,850
Calendar year 1936	284,493	3,840	-	777	564,300
January. February Haroth. April Hay June July August September.	9,920 7,840 11,079 19,262 38,034 33,192 22,644 15,912 12,831	412 1,320 1,930 1,690 891 655 526	378 552 831 593 429 378	320 280 357 642 1,227 1,106 730 513 428	19,680 15,550 21,970 38,210 75,440 65,840 44,910 31,560 25,450
Water year 1936-37	207,030	1,930	-	567	410,600

*Discharge measurement.

Diversions from Teton River between St. Anthony gaging station and mouth, Idaho

Between St. Anthony gaging station and mouth of stream 15 canals divert water from Teton River for irrigation. Records available for part of each irrigation season during 1919-37.

Discharge of each canal computed from daily staff-gage readings and results combined to show total diversion. Records good except those for May which for some canals are based on twice-weekly readings and are fair.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5								58 58 58 125 183	1,080 1,040 1,040 1,020 1,000	865 720 717 709 733	639 623 553 536 520	395 387 388 424 513
6 7 8 9 10								249 287 300 337 380	858 847 936 926 987	768 786 862 805 746	493 524 515 554 534	492 468 463 468 445
11 12 13 14 14								532 546 560 579 650	997 977 820 855 894	730 718 679 607 720	543 520 458 417 394	38 4 369 369 360 358
16 17 18 19 20								741 792 826 884 908	1,000 1,020 1,180 1,260 1,220	S43 733 658 667 666	410 406 405 410 493	364 361 361 344 347
21 22 23 24 25							-	940 986 1,000 1,140 1,210	1,280 1,340 1,430 1,390 1,300	625 540 554 564 593	500 499 491 497 492	346 346 361 360 377
26 27 28 29 30 31								1,230 1,260 1,290 1,320 1,310 1,200	1,200 1,130 926 915 896	620 651 633 545 527 523	439 398 387 404 398 402	347 339 341 341 343

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
Calendar year	,				
January. February Karch. April May. June July August September.	21,9 3 9 31,794 21,110	1,320 1,430 865 639 513	58 820 523 387 341	708 1,060 681 479 385	43,520 63,060 41,870 29,460 22,930
The period					200,800

Blackfoot River near Blackfoot, Idaho

Location.- Water-stage recorder, lat. 43°08', long. 112°28', at east quarter corner of sec. 28, T. 3 S., R. 34 E., about 2 miles above mouth, 9 miles southwest of Blackfoot. Prior to June 26, water-stage recorder half a mile upstream.

Records available. - July 1913 to September 1937.

Extremes. - Maximum discharge during year, 554 second-feet May 9 (gage height, 8.02 feet); minimum, 1 second-foot on several days.

1913-37: Maximum discharge, 868 second-feet May 21, 1921; no flow on many days.

Remarks. - Records good except those for period of ice effect or missing gage heights Jan.

1 to March 31, which were computed on basis of two discharge measurements and gage heights and are poor. Records Dec. 1 to March 31 based on occasional staff-gage readings at temporary station in Blackfoot. Flow regulated by storage at Blackfoot dam and by irrigation diversions from and waste into Blackfoot River above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.
1 2 3 4 5	*60 *50 45 35 37	221 274 303 373 304	*220 *220 223 307 †303	160 150 90 60		60 60 70 77 72	*70 70 †73 †75 78	116 96 132 230 301	259 163 217 295 252	15 8 4 8 7	3 99 25 5 2	1 1 1 1
6 7 8 9 10	†47 57 44 32 46	301 303 242 201 215	†300 296 †278 †260 †242			66 79 94 78 61	80 87 108 112 106	452 498 542 554 550	282 244 120 124 205	6 13 109 149	2 2 1 1	1 1 1 1
11 12 13 14 15	45 33 22 89 108	208 196 188 199 205	223 †227 †231 235 †232	. 56		64 66 68	123 98 85 75 75	506 424 286 227 240	192 148 196 196 91	42 81 143 92 39	1 1 1 1	1 1 1 2
16 17 18 19 20	196 265 248 205 232	199 208 236 228 199	229 †282 334 280 238	56	**41		77 85 85 87 89	172 145 110 104 111	32 12 10 19 34	23 11 6 5	1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
21 22 23 24 25	188 174 187 169 160	201 192 185 134 151	†264 289 286 273 267			65	71 99 94 111 126	*90 *6 *6 *#6 *#6	54 38 9 6 77	2 1 1 1	1 1 1 1	2 7 6 4
26 27 28 29 30 31	179 160 80 98 188 212	†172 †192 212 *215 *215	318 270 241 226 223 216	**56 } 50			91 88 124 172 160	*6 *6 *6 *6 42 261	68 47 38 29 22	1 1 1 1 1	1 1 1 1	4 3 2 2 2 -

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,691 6,672 8,033	265 373 334	22 134 216	119 222 259	7,320 13,2 3 0 15,930
Calendar year1936	46,560	598	0	127	92,340
January. February. Haroh. April Hay June July August September.	1,260 2,085 2,874 6,237 3,539 784	160 - 172 554 295 149 99 7	70 6 6 1 1	63 45 67.3 95.8 201 118 25.3 5.2 2.0	3,880 2,500 4,140 5,700 12,370 7,020 1,560 321 119
Water year 1936-37	37,351	554	1	102	74,090

^{*}Estimated.

[†]Interpolated. **Discharge measurement.

MUD LAKE BASIN

Mud Lake near Terreton, Idaho

Location.- Water-stage recorder, lat. 43°53', long. 112°24', in SW\u00e4 sec. 1, T. 6 N.,
R. 34 E., about 2 miles north of Owsley Canal Co. pump house, 2-1/2 miles northeast of Terreton, and 14 miles southwest of Hamer. Staff gage at first Owsley
Canal Co. pumping plant used occasionally. Zero of each gage 1s 4,775.33 feet above
mean sea level.

Records available .- April 1921 to September 1937.

Extremes. - Maximum daily contents during year, 22,500 acre-feet May 9, 11-13 (mean daily gage height, 5.27, 5.28 feet); minimum, 5 acre-feet (estimated) Sept. 28-30, 1921-37: Maximum contents observed, 61,660 acre-feet May 5, 1923 (gage height, 9.20 feet); minimum, that of Sept. 28-30, 1937.

Remarks. - Records good. High winds occasionally disturb the recording of mean lake stages. Contents for Oct. 1-6, 8-13, 15-31, Nov. 1-7, 9-17, Feb. 5-7, 11, 12, 14, 16, 18, 20, 21, 25, 28, Mar. 3, 5, 8, 9, 15, 18 interpolated; those for Nov. 8 computed on basis of one staff reading and interpolation. Water diverted from tributaries and from lake by pumping and gravity during irrigation season. Camas Creek diversion canal reported operating Oct. 1 to Nov. 8 and July 22 to Sept. 30.

Gage-height record furnished by water commissioner for Mud Lake and Owsley Canal Co.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.
1	500	160	2,690	6,540	11,700	14,700	18,300	21,700	16,400	5,900	2,240	330
2	470	160	2,750	6,690	11,700	14,800	18,500	21,800	16,000	5,580	2,320	290
3	450	150	2,800	6,880	11,800	14,800	18,600	21,900	15,700	5,390	2,290	260
4	420	140	2,860	6,940	12,000	14,900	18,700	22,000	15,500	5,100	2,210	230
5	400	140	2,910	7,130	12,100	15,000	15,800	22,100	14,700	4,900	2,100	200
6	370	130	3,130	7,360	12,200	15,100	19,000	22,300	14,200	4,880	1,780	170
7	350	130	3,270	7,210	12,400	15,200	19,100	22,400	13,800	4,640	1,750	140
8	340	140	3,390	7,590	12,500	15,300	19,200	22,400	13,500	4,500	1,680	110
9	330	250	3,570	7,650	12,700	15,300	19,300	22,500	13,200	4,350	1,860	90
10	320	370	3,680	7,740	13,000	15,400	19,400	22,400	13,000	4,210	1,790	70
11	300	490	3,820	7,890	13,100	15,400	19,500	22,500	12,800	4,090	1,690	60
12	290	620	3,910	8,050	13,100	15,500	19,600	22,500	12,400	3,930	1,640	60
13	280	740	4,030	8,200	13,200	15,600	19,800	22,500	12,100	3,680	1,550	50
14	270	860	4,130	8,430	13,400	15,800	19,800	22,400	11,800	3,720	1,400	50
15	260	980	4,210	8,620	13,600	16,000	19,900	22,300	11,500	3,650	1,240	45
16	260	1,100	4,290	8,820	13,600	16,100	20,100	22,100	11,000	3,540	1,130	40
17	250	1,220	4,410	9,320	13,600	16,300	20,100	22,000	10,600	3,370	1,060	35
18	250	1,340	4,620	9,490	13,700	16,400	20,200	21,900	10,100	3,300	1,010	30
19	240	1,450	4,680	9,630	13,800	16,500	20,400	21,600	9,800	3,180	960	25
20	230	1,580	4,750	9,770	13,900	16,800	20,400	21,400	9,290	3,080	910	20
21	230	1,680	4,830	9,880	14,000	17,000	20,200	21,200	9,050	2,890	860	20
22	220	1,790	4,970	9,950	14,100	17,000	20,600	20,800	8,690	2,960	810	15
23	220	1,910	5,050	10,100	14,200	17,500	20,700	20,400	7,980	2,910	760	15
24	210	2,020	5,160	10,300	14,200	17,400	20,700	20,000	7,950	2,840	710	10
25	200	2,090	5,280	10,500	14,300	17,600	20,800	19,500	7,620	2,790	660	10
26 27 28 29 30 31	200 190 190 180 170	2,200 2,290 2,380 2,480 2,620	5,460 5,650 5,800 5,980 6,150 6,360	10,700 11,000 11,100 11,300 11,400 11,600	14,400 14,500 14,500	17,600 17,700 17,900 18,000 18,100 18,200	20,900 20,800 21,100 21,300 21,500	19,100 18,700 18,000 17,500 17,400 16,700	7,270 6,990 6,720 6,380 6,180	2,750 2,700 2,530 2,500 2,370 2,370	610 560 510 460 410 370	10 10 5 5 5

54 MUD LAKE BASIN

Camas Creek at Eighteenmile Shearing Corral near Kilgore, Idaho

Location.- Water-stage recorder, lat. 44°18', long. lll°52', in sec. 7, T. ll N., R. 39 E., at county-road bridge at Eighteenmile Shearing Corral, 7 miles south of Kilgore and 18½ miles northeast of Dubois.

Drainage area. - 210 square miles.

Records available.- May 1936 to September 1937. Prior to May 27, 1937, discharge measurements only.

Extremes.- Maximum discharge observed during year, 447 second-feet on May 4 (gage height, 2.28 feet); minimum, 0.9 second-foot Aug. 25 (gage height, 0.07 foot).

Remarks.- Records good. No regulation. Numerous small diversions for stock or irrigation above and below station. Observer services and five discharge measurements furnished by watermaster for Irrigation District No. 66.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	11:11							- - 432	50 54 45 40 37	8.7 11 9.8 9.2 9.8	9.2 9.2 7.6 7.0 7.0	2.0 2.0 2.2 2.2 2.0
6 7 8 9 10	9.s								32 33 30 28 59	12 13 14 14 14	5.8 5.1 5.1 6.2 8.2	2.4 2.4 2.2 2.4 2.2
11 12 13 14 15	- 9,8 -							93	61 62 87 73 57	11 10 8.2 5.7 10	5.1 4.0 3.7 4.0 4.0	2.4 2.4 2.2 2.2 2.4
16 17 18 19 20								- - 85	45 38 34 32 30	12 10 8.7 8.2 8.2	3.4 2.8 2.6 2.2 2.2	2.0 1.8 1.8 2.2 2.4
21 22 23 24 25	-								26 24 24 22 22 22	7.6 7.0 6.2 6.2 6.5	2.0 1.8 1.8 1.4 1.2	3.4 3.4 2.4 4.0 3.7
26 27 28 29 30 31								45 44 41 38 40	20 14 11 10 9,2	6.2 10 8.7 6.5 5.8 6.5	1.2 1.4 1.6 1.6 2.2 2.4	3.4 3.4 4.4 4.4

Month	Second- foot-days	Faximum	Minimum	Mean	Run-off in acre-feet
October					
Calendar year					
January February Barch April April Jun Say 27-51 Jun Jun September		45 87 14 9.2 4.4	38 9.2 5.8 1.2 1.8	41.6 37.0 9.28 3.97 2.69	244
The period					3,590

Camas Creek at Camas, Idaho

Location.- Water-stage recorder, lat. 44°00', long. 112°13', in E½SE½ sec. 21, T. 8 N., R. 36 E., 350 feet above Oregon Short Line Railroad bridge at Camas and half a mile above mouth of Beaver Creek.

Records available .- April 1925 to September 1937.

Average discharge. - 11 years (1926-37), 12.5 second-feet.

Extremes. - Maximum discharge during year, 283 second-feet May 5 (gage height, 2.02 feet); no flow during most of year.

1925-37: Maximum discharge, 446 second-feet Apr. 24, 1936 (gage height, 2.27 feet, former datum); no flow June 1-7, 1926, and for many periods during 1930-37.

Remarks. - Records good. Diversions for irrigation and stock water above station. Water commissioner for Mud Lake furnished gage-height record and results of three discharge measurements.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	A	pr.	May	June	July	Aug	. Sept.
1 2 5 4 5								00000	78 116 176 222 222	7 10 14 11 9			
6 7 8 9 10								00000	150 109 94 78 84	8 6 3 6 3			
11 12 13 14 15								00000	86 69 53 32 24	7 23 24 32 28			
16 17 18 19 20								1110	21 21 16 12 13	16 10 5 4 2			
21 22 23 24 25								19 27 42 51 55	15 17 14 9 10	0 0 0			
26 27 28 29 30 31				:				60 90 120 118 86	7 7 7 6 6 7	00000			
	Month			Second foot-d	d- ays	¥а	ximum	Minimum	Mea	n	Run-off in acre-feet		
HOTE	October				000		0	0	l l	0	0		

Month	foot-days	Maximum	Minimum	Mean	acre-feet
October	0	0	0	0	0
November	0	0	8	0	8
Oalendar year1936	4,340	360	0	11.9	8,600
January	0	0	0	0	0
February	0	٥ ا	. 0	0	1 0
March	Ö	Ō	l ō	l ō	l ō
April	672	120	Ō	22.4	1,330
May	1.781	222	6	57.5	3,530
June	228	32	ň	7.6	3,530 452
July		1 0	ŏ	6,12	1 7
August	۱ ۸	l ŏ	ň	l ă	۱ ۸
September	ŏ	ŏ	ŏ	ŏ	ŏ
Water year1936-37	2,681	222	0	7.3	5,310

Beaver Creek at Dubois, Idaho

Location.- Water-stage recorder, lat. $44^{\circ}11^{\circ}$, long. $112^{\circ}14^{\circ}$, in NW $_4^{\circ}$ sec. 21, T. 10 N., R. 36 E., half a mile north of Dubois.

Drainage area. - 220 square miles.

Records available .- April 1921 to September 1937.

<u>Discharge.- Maximum discharge during year</u>, 15 second-feet Apr. 22 (gage height, 0.93 foot); no flow during most of year.
1921-37: Maximum discharge, 858 second-feet Apr. 7, 1930; maximum gage height, about 6.5 feet Mar. 16, 1926; no flow for long periods.

Remarks. - Records good. Diversions for irrigation above station. Gage-height and one discharge measurement furnished by water commissioner for Mud Lake. Gage-height record

Discharge, in second-feet, water year October 1936 to September1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5							00000	0 1 0 0				
6 7 8 9 10							0000	0 0 0 0				
11 12 13 14 15							0000	0 0 0				
16 17 18 19 20					;		0 0 1 7 6	00000	l			
21 22 23 24 25							8 9 2 0	00000				
26 27 28 29 50 31							0000	0 0 0 0				

Month	Second- foot-days	Maximum	Minimum	Kean	Run-off in acre-feet
October November December	0 0	0	0 0 0	0 0 0	0
Calendar year 1936	310	49	0	.8	615
January. February March. April. May June July August September.	0 0 0 35 1 0 0	0 0 9 1 0 0	0 0 0 0 0 0	0 0 0 1.2 .0 0	0 0 0 69 24 0 0
Water year 1936-37	36	9	0	0.1	771.0

Beaver Creek at Camas, Idaho

Location.- Staff gage, lat. 44°01', long. 112°14', in NE# sec. 21, T. 8 N., R. 36 E., a quarter of a mile northwest of Oregon Short Line Railroad station at Camas and three-eights of a mile above confluence with Camas Creek.

Records available. - April 1921 to September 1937.

Extremes. - 1921-37: Maximum discharge, 163 second-feet Apr. 7, 1930. Usually no flow past station except for short period during spring of each year.

Remarks. - No flow reached station during water year 1936-37. Flow affected by irrigation diversions above Dubois, about 14 miles above gage, and by heavy channel losses below Dubois.

Little Lost River near Howe, Idaho

Location. Staff gage, lat. 43°53', long. 113°06', in sec. 3, T. 6 N., R. 28 E., a quarter of a mile above diversion dam of Blaine County Investment Co., 6 miles northwest of Berenice, and 7 miles northwest of Howe.

Records available .- April 1921 to September 1937 except during winters.

Extremes. - Maximum discharge during year, 48 second-feet May 21-23, May 28 to June 1,
June 12; maximum gage height, 0.70 foot May 23, May 29 to June 1; minimum discharge
observed, 14 second-feet Aug. 7, 8, Sept. 3, 4; minimum gage height, 0.16 foot Aug. 7.
1921-37: Maximum discharge, about 450 second-feet Aug. 11, 1936, during cloudburst
(gage height, 3.1 feet, from high-water mark); minimum, 13 second-feet Apr. 15, 20,
1923 (gage height, -0.12 foot).

Remarks.- Records good. No records Nov. 4 to Apr. 5. Discharge for July 23 interpolated.

Numbrous irrigation diversions above and below station. Prior to 1937 water was stored in small reservoir of Blaine County Investment Co. on Dry Creek, about 40 miles upstream, and during irrigation seasons was released and carried through Corral and Wet Creeks to Little Lost River from which it was diverted into the company's main canal a quarter of a mile below station. Gage-height record furnished by watermaster for Little Lost River.

Discharge, in second-feet, water year October 1936 to September 1937

рау	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	41 42 42 42 42	37 25 25 -						26 26 28 30 33	48 47 43 42 47	29 25 24 22 22	21 22 23 22 21	20 21 14 14 16
6 7 8 9 10	43 42 42 41 41	11111					20 20 20 20 21	40 42 37 39 40	46 42 39 41 47	25 32 29 31 30	15 14 14 15 18	17 16 16 17 20
11 12 13 14 15	40 40 41 42 43	11111					20 18 18 20 19	39 40 37 37 40	45 48 45 40 40	21 21 16 18 22	18 18 18 18 18	24 23 23 22 22 22
16 17 18 19 20	44 45 45 40 40	1111					18 18 23 21 20	40 44 46 46 47	40 37 40 41 38	22 19 21 21 19	18 18 18 18 18	22 22 22 23 23
21 22 23 24 25	40 39 40 42 31	11111					19 23 20 22 21	48 48 48 47 46	32 33 30 32 39	19 18 18 17 18	18 18 18 19 20	23 23 25 25 26
26 27 28 29 30 31	32 28 26 29 36 32	111111					21 21 23 28 28	46 48 48 47 48	36 36 30 30 30	23 23 23 22 22 22	20 19 18 19 20 20	26 26 26 26 26

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,212	45	26	39.1	2,400
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year					
January	-	_	-	-	-
February	-	-	-	-	-
March		-	-	-	-
April 6-30	522	28	18	20.9	1.040
May	1.277	48	26	41.2	2,530
June	1.184	48	30	39.5	2,350
July		32	16	22.4	1.380
August		23	14	18.5	1.140
September	647	26	14	21.6	1,280
Water year · · · · · · · · · · · · · · · · · · ·					

Blaine County Investment Co.'s canal near Howe, Idaho

Records available. - April 1924 to September 1937 (irrigation seasons only).

Extremes. - Maximum discharge observed during year, 9.4 second-feet Apr. 2-5; practically no flow during winter except leakage through headgates and none reported Oct. 1-9, 16-25, Apr. 9 to Sept. 30.

1924-37: Maximum discharge observed, 87 second-feet May 24, 25, 1928; practically no flow during nonirrigation season and none reported June 26 to Sept. 1, Sept. 15, 16, 1934, July 24 to Oct. 9, 16-25, 1936, Apr. 9 to Sept. 30, 1937.

Remarks. - Records fair. None for Nov. 6 to Mar. 30. Canal diverts water from Little Lost River in sec. 2, T. 6 N., R. 28 E., for irrigation on lands in project of the Blaine County Investment Co. Gage heights and discharge for Oct. 26 to Nov. 5, Apr. 5-8 furnished by watermaster for Little Lost River; discharge for Mar. 31 to Apr. 4 furnished by watermaster for Blaine County Investment Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	Жау	June	July	Aug.	Sept.
1 2 3 4 5	0 0 0 0	66666					5.4 9.4 9.4 9.4 9.4					
6 7 8 9 10	0 0 0 5.9	-			:		7.0 7.0 4.2 0					
11 12 13 14 15	4.9 4.3 4.3 4.3 2.0	-					00000					
16 17 18 19 20	0 0 0 0	-					00000					
21 22 23 24 25	0 0 0						0 0 0					
26 27 28 29 30 31	3.1 6.0 6.0 6.0 6.0	-				2.5	00000					
					<u> </u>	Second			L		I Poi	n-off in

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	58.8 30	6.0 6	0 6 	1.90 6.0	117 60 -
Calendar year					
January. February March 31. Apr11 May June July August	2.5 61.2 0 0	- 9.4 0 0		2.04 0 0	- - 121 0 0
September	ŏ	Ŏ	ő	ŏ	0
Water year					

Big Lost River at Howell ranch, near Chilly, Idaho

Location. Water-stage recorder, lat. 44°01', long. 114°00', in sec. 30, T. 8 N., R. 21 E., at Howell ranch, 9 miles southwest of Chilly, and 21 miles northwest of Mackay.

Records available. - April 1904 to August 1906, July 1907 to November 1914, May 1920 to September 1937, except during winters.

Extremes. - Maximum discharge during year, 910 second-feet June 22 (gage height, 2.80 feet); minimum discharge recorded, 22 second-feet (discharge measurement) Nov. 23; minimum gage height, 0.66 foot Sept. 2, 4. A lesser discharge may have occurred during winter.

ing winter.
1904-14, 1920-37: Maximum discharge, 3,500 second-feet June 12, 1921 (gage height, 5.94 feet); minimum, that of Nov. 23, 1936.

Remarks.- Records good except those for Apr. 1-9, which are poor, and for Apr. 10-22, which are fair. Discharge for period of ice effect, Apr. 1-22 computed on basis of weather records, one discharge measurement, and comparison with records for Salmon River near Clayton. No records Nov. 2-22, Nov. 24 to Mar. 31. No regulation. Several small diversions above station; and Hammerly ditch (capacity about 20 second-feet) diverts a quarter of a mile below station. Gage-height record furnished by watermaster for Big Lost River.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used July 28 to Sept. 7)

Oct. 1 to	Nov. 1		Apr.	23 to	Sept. 30		
0.70	53	0.60	46	1.40	184	2.20	503
.80	64	.80	67	1.60	245	2.40	622
.90	77	1.00	97	1.80	318	2.60	758
1.00	93	1.20	135	2.00	403	2.80	910

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	74 74 72 72 73	67					40	101 131 181 245 326	432 399 467 532 422	303 288 270 252 273	95 92 91 84 81	50 49 50 50 59
6 7 8 9 10	73 73 72 72 70						*41	390 408 403 441 487	381 359 372 394 408	347 273 307 394 276	78 77 75 73 71	59 55 53 53 53
11 12 13 14 15	68 69 69 69						40 40 50 70 90	456 456 498 622 695	363 330 314 314 334	235 216 204 213 213	68 66 67 66 63	53 52 53 54 54
16 17 18 19 20	68 68 68 68						80 70 65 65 70	688 723 780 765 642	381 467 385 343 408	179 161 151 142 133	65 66 66 61	53 53 53 53 53
21 22 23 24 25	67 65 67 74 74	*22					80 75 70 65 73	585 681 765 737 751	603 802 642 456 372	127 123 123 117 125	60 60 59 57 56	84 83 74 67 66
26 27 28 29 30 31	69 68 68 76 67 65						91 106 99 83 86	709 751 802 758 610 493	343 322 338 355 334	129 119 111 106 99 97	56 53 52 52 52 51	65 62 61 61 60

······································	L		J		
Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October November December	2,169	76 - -	65 - -	70.0	4,300 - -
Calendar year					
JanuaryFebruary	_	111		-	-
April May June	1,869	106 802 802	101 314	62.3 551 412	3,710 33,880 24,540
JulyAugust	6,106	394 95 84	97 51 49	197 67.0 58.2	12,110 4,120 3,460
Water year					

^{*}Discharge measurement.

⁷⁷⁷⁹⁴ O-38---5

Big Lost River (east channel) above Mackay Reservoir, near Mackay, Idaho

Location. - Water-stage recorder, lat. 43°59', long. 113°45', in sec. 32, T. 8 N., R. 23 E., 3 miles above Mackay Dam, above flow line of reservoir, and about 7½ miles northwest of Mackay.

Records available .- May 1919 to September 1937.

Average discharge .- 18 years, 44.0 second-feet.

Extremes. - Maximum discharge during year, 207 second-feet June 23 (gage height, 2.33 feet); no flow during most of year.
1919-37: Maximum discharge, 1,000 second-feet June 25, 1932 (gage height, 3.48 feet, former site and datum); no flow for long periods during 1920 and 1923-37.

Records.- Records good. Discharge June 11, 25, July 9 interpolated. Diversions for Irrigation above station. The sum of the discharge of east and west channels of Big Lost River and of east and west channels of Warm Spring Creek represents entire flow of Big Lost River at this point and practically entire surface flow into Mackay Reservoir. Gage-height record furnished by watermaster for Big Lost River.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.30 0 .50 1.5 .70 6.5 .90 15.5 1.10 28.5 1.30 46.0 1.70 96.5 2.10 164 2.40 220

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	· Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5								· 0000	110 59 81 86 82	46 32 23 9 2		
6 7 8 9 10								0 0 0 0	67 45 35 32 32	2 1 1 1 1		
11 12 13 14 15								0000	28 23 20 17 16	1 1 0 0 0		
16 17 18 19 20								0 0 0 0	14 16 28 48 55	0000		
21 22 23 24 25								12 32 69 98 110	91 166 192 162 128	0000		
26 27 28 29 30 31								129 139 162 177 166 138	94 81 63 42 41	0000		

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0 0 0	0	0 0	000	0
Calendar year 1936	8,307	322	0	22.7	16,480
January. Pebruary Karch. April May. June July August September.	0 0 0 0 1,232 1,984 120 0	0 0 0 0 177 192 46 0 0	0 0 0 0 14 0 0	0 0 0 39.7 66.1 3.9 0	0 0 0 2,440 3,940 238 0
Water year 1936-37	3,336	192	0	9.1	6,620

Big Lost River (west channel) above Mackay Reservoir, near Mackay, Idaho

Location.- Water-stage recorder, lat. 43°58', long. 113°45', in sec. 5, T. 7 N., R. 23 E., 3 miles above Mackay Dam, above flow line of reservoir, and about 7½ miles northwest of Mackay.

Records available .- May 1919 to September 1937.

Average discharge. - 18 years, 52.3 second-feet.

Extremes. - Maximum discharge during year, 88 second-feet June 23 (gage height, 1.51 feet);

minimum, 20 second-feet May 5, 6 (gage height, 0.91 foot).
1919-37: Maximum discharge (estimated), 1,200 second-feet, during period June 5-16,
1921 (gage height, 4.45 feet); minimum, 9 second-feet May 22, 28, 1935.

Remarks.- Records good. Diversions for irrigation above station. The sum of the discharge of east and west channels of Big Lost River and of east and west channels of Warm Spring Creek represents entire flow of Big Lost River at this point and practically the entire surface flow into Mackay reservoir. Gage—height record and result of one discharge measurement furnished by watermaster for Big Lost River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	How.	Dec.	Jan.	Feb.	Mar.	Apr	٠.	May	June	July	Aug	. Sept.
1 2 3 4 5	40 40 40 40 40	42 41 41 41 41	*35 *34 *34 *33 33	*29 29 29 29 29	25 25 *25 *25 *25	22 22 *22 *22 *21		22 22 22 22 22 22	21 21 21 23 21	62 55 51 53 58	37 34 32 31 32		24 26 24 26 25 26 24 25 24 25
6 7 8 9 10	41 41 41 41 41	41 40 40 39 39	33 33 34 34 34	29 *29 *29 29 *29	25 25 24 24 *24	21 21 21 21 21		22 21 21 21 21 21	21 21 21 21 21	55 53 53 53 51	32 32 34 33 32		23 27 25 27 26 26 26 27 25 27
11 12 13 14 15	41 41 41 41 41	39 38 38 38 38	34 34 33 33 33	*29 *29 *29 *29 *29	24 24 25 25 25	21 21 21 21 21		21 21 21 21 21 21	21 22 22 22 22	50 51 50 48 46	31 30 29 29 29		26 27 26 27 26 28 26 28 26 28
16 17 18 19 20	41 41 41 41 40	38 38 38 38 38	32 31 31 31 31	29 29 29 29 28	25 24 24 *24 *24	21 21 21 21 21	i	21 21 21 21 21 21	22 22 21 21 23	44 45 48 54 53	27 27 26 26 25		26 28 26 28 26 28 26 28 27 28
21 22 23 24 25	40 40 41 41 41	37 36 36 36 36	31 31 31 31 31	#27 #27 26 26 #26	24 24 23 *23 *23	21 22 22 22 22 *22		21 21 21 21 21 21	26 31 35 44 50	56 68 e5 80 67	25 25 25 25 25		26 29 26 29 26 29 25 29 25 29
26 27 28 29 30 31	41 41 42 42 42 42	36 36 36 *36 *35	31 31 31 30 *30 *30	*26 *26 *25 *25 25	*23 23 22 -	*21 21 22 22 22 22		22 22 22 21 21	55 58 64 75 76 68	67 62 56 50 47	24 24 24 23 23 24		25 29 25 29 24 30 24 30 25 30 26 -
Γ	<u>-</u>	1	ionth			Second foot-de		Maz	rimm	Minimu	Mea	n	Run-off in
October					1,	267 146 998		42 42 35	4 3 3	5	40.9 38.2 32.2	2,510 2,270 1,980	
C	Calendar year 1936					14,	846		234	1	4	40.6	29,430
Feb Mar Apr May Jun Jul Aug	January. Pebruary March. April. May June. June. June. July. August. September.					1, 1,	863 676 663 639 012 671 875 784 834		29 25 22 22 76 85 37 27	2	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	27.8 24.1 21.4 21.3 32.6 55.7 28.2 25.3 27.8	1,710 1,340 1,320 1,270 2,010 3,310 1,740 1,560

11,428

e5

21

31.3

22.670

Water year 1936-37.....

^{*}Interpolated.

Combined discharge, in second-feet, of Big Lost River (east and west channels) and Warm Spring Creek (east and west channels) above Mackey Reservoir, near Mackey, Idaho, 1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Ap	r.	Nay	June	July	Aug	. s	ept.
2 3 4 5	145 145 147 147 147	157 156 160 161 160	152 150 149 145 144	133 131 131 132 133	122 121 121 121 121	116 117 118 119 118		119 118 117 117	92 93 93 94 92	292 254 240 250 254	177 156 143 130 129	10 10 10	05 06 08 07	103 104 105 106 108
6 7 8 9	149 149 152 152 152	160 157 157 156 156	144 144 142 142 142	132 132 132 132 132	123 123 120 119 117	118 118 118 118 118		117 114 114 112	92 92 92 92 92	232 206 195 195 192	131 125 140 130 127	1: 1: 1:	07 10 11 11	112 112 114 115 116
11 12 13 14 15	150 150 149 149 148	156 155 155 155 155	141 142 141 141 141	132 132 132 132 133	119 118 119 120 119	118 117 117 117 117	-	110 104 104 102 99	92 94 94 94	183 180 180 183 182	124 122 118 118 118	1: 1: 1:	09 09 08 08	116 117 118 120 120
16 17 18 19 20	148 148 148 151 152	155 155 154 154 154	139 138 137 135 135	132 132 131 131 124	121 120 121 121 118	117 116 117 116 117		99 99 98 97 97	95 96 97 99 113	177 178 190 218 225	113 111 110 108 107	1	05 05 03 03 02	119 117 116 116 120
21 22 23 24 25	152 153 156 157 158	153 150 150 151 151	135 135 136 138 138	125 126 127 127 128	121 120 119 117 117	117 120 118 118 118		96 96 95 94 93	132 165 212 253 274	257 345 394 359 310	107 106 108 113 111	1	02 02 02 00 98	124 123 123 123 124
26 27 28 29 30 31	157 158 158 155 155 155	151 153 155 155 153	138 138 138 137 134 134	127 126 125 124 123 122	117 116 115	116 117 118 118 119 118		92 92 93 92 90	304 319 352 380 373 331	279 256 226 196 187	111 108 105 102 103 104	1	98 99 99 99 02 04	124 123 123 122 119
	Nonth					Second foot-da		Max	rimm	Minimum	Mea	n.	Run-e	off in -feet
Oct	etober					4,	694		158	14	5	151	9	,310

Month	Second- foot-days	Yazimm	Minimum	Mean	Rum-off in acre-feet
October	4,694 4,650 4,345	158 161 152	145 150 134	151 155 140	9,310 9,220 8,620
Calendar year 1936	64,654	793	91	177	128,200
January February Karch April Bay June June July August September	4,011 3,346 3,644 3,101 4,987 7,015 3,715 3,245 3,502	133 123 120 119 380 394 177 111	122 115 116 90 92 177 102 98	129 120 118 103 161 234 120 105	9,890 13,910 7,370
Water year 1936-37	50,255	394	90	138	99,690

Mackay Reservoir near Mackay, Idaho

Location.- Staff gage on head-gate tower of dam, lat. 43°57', long. 113°40', in sec. 12, T. 7 N., R. 23 E., 4 miles northwest of Mackay. Zero of gage is 6,000 feet above mean sea level.

Records available .- January 1919 to September 1937.

Extremes. - Maximum contents during year, 22,030 acre-feet Apr. 22 (gage height, 47.28 feet); minimum, 92 acre-feet Aug. 13 to Sept. 6 (gage height, 7.55 feet).

1919-37: Maximum contents, 40,500 acre-feet June 26, 1922 (gage height, 63.62 feet); no available storage during periods in 1919, 1920, 1924, 1926, 1929, and 1931-1935; minimum stage, 6.3 feet Aug. 5, 1934.

Remarks. - Capacity of reservoir is 38,400 acre-feet between gage heights 7.0 and 62.0 feet. Water is used for irrigation of lands within Big Lost River irrigation district. Because its foundation is porous there is considerable seepage around the dam, the greater part of Which reappears between reservoir and station on Big Lost River below Mackay Reservoir near Mackay. Gage-height record and capacity table furnished by watermaster for Big Lost River.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,573	254	7,190	12,910	16,590	19,120	21,280	21,920	18,190	9,797	733	92
2	2,391	229	7,382	13,050	16,710	19,170	21,360	21,880	17,640	9,263	565	92
3	2,214	185	7,559	13,200	16,830	19,250	21,460	21,860	16,950	8,745	439	92
4	1,987	258	7,728	13,350	16,960	19,340	21,560	21,860	16,540	8,594	361	92
5	1,734	457	7,916	13,490	17,080	19,430	21,560	21,830	16,210	8,278	314	92
6	1,642	758	8,118	13,620	17,180	19,480	21,600	21,780	15,860	7,916	268	92
7	1,613	1,062	8,325	13,730	17,260	19,520	21,650	21,760	15,700	7,671	200	97
8	1,563	1,412	8,534	13,840	17,340	19,600	21,700	21,760	15,570	7,360	147	105
9	1,505	1,767	8,770	13,950	17,420	19,690	21,740	21,740	15,410	6,964	110	114
10	1,549	2,063	8,972	14,070	17,510	19,780	21,790	21,720	15,120	6,785	95	122
11	1,401	2,310	9,177	14,180	17,590	19,870	21,840	21,720	14,850	6,864	97	131
12	1,292	2,671	9,395	14,290	17,670	19,950	21,860	21,720	14,630	6,890	95	134
13	1,224	2,906	9,618	14,410	17,720	20,010	21,890	21,720	14,470	6,843	92	134
14	1,144	3,136	9,797	14,520	17,840	20,050	21,900	21,690	14,440	6,744	92	134
15	1,073	3,409	9,984	14,630	17,920	20,100	21,930	21,640	14,220	6,593	92	139
16 17 18 19 20	964 850 785 760 716	3,660 3,964 4,224 4,498 4,778	10,180 10,400 10,590 10,750 10,920	14,750 14,860 14,980 15,090 15,210	18,010 18,090 18,180 18,260 18,350	20,180 20,270 20,360 20,410 20,460	21,950 21,950 21,980 22,000 22,000	21,620 21,600 21,580 21,580 21,600	14,020 13,790 13,560 13,330 13,200	6,440 6,320 6,215 6,013 5,794	92 92 92 92	142 142 142 147 150
21	649	5,017	11,090	15,330	18,430	20,540	22,000	21,690	13,100	5,293	92	150
22	610	5,224	11,260	15,420	18,520	20,630	22,030	21,680	13,100	4,805	92	150
23	619	5,480	11,460	15,520	18,600	20,680	22,020	21,550	13,140	4,379	92	150
24	580	5,717	11,650	15,640	18,690	20,730	21,970	21,450	12,980	3,825	92	155
25	468	5,959	11,820	15,760	18,770	20,780	21,950	21,280	12,520	3,489	92	158
26 27 28 29 30 31	352 266 322 348 322 290	6,155 6,335 6,578 6,791 6,991	12,000 12,180 12,330 12,470 12,620 12,760	15,870 15,990 16,110 16,230 16,350 16,470	18,860 18,950 19,030	20,820 20,870 20,950 21,040 21,130 21,220	21,950 21,950 21,950 21,950 21,950	21,170 20,970 20,700 20,220 19,280 18,450	12,340 11,520 11,310 10,910 10,310	3,049 2,542 2,130 1,725 1,331 977	92 92 92 92 92 92	158 212 217 180 162

Big Lost River below Mackay Reservoir, near Mackay, Idaho

Location. - Water-stage recorder, lat. 43°56', long. 113°38', in sec. 18, T. 7 N., R. 24 E., 450 feet below Oleson Suspension Bridge, 1 mile below heading of Sharp Ditch, 1½ miles below Mackay Dam, and 2½ miles northwest of Mackay.

Records available.- December 1903 to August 1906, May 1912 to March 1915, January 1919 to September 1937. April 1913 to March 1915, at station 1 mile downstream.

Average discharge. - 21 years (1904-5, 1912-14, 1919-37), 252 second-feet.

Extremes.- Maximum discharge during year, 715 second-feet May 30, 31; maximum gage height, 3,06 feet May 30; minimum discharge, 35 second-feet Nov. 11 (gage height, 1.37 feet).

1903-6, 1912-15, 1919-37: Maximum discharge, 2,990 second-feet June 10, 1921 (gage height, 5.79 feet); minimum discharge, 18 second-feet Nov. 1, 1934; minimum gage height, 1.23 feet Nov. 5-8, 1926.

Remarks. - Records good. Discharge for Jan. 3-8, 10-15, 17-22, 24-29, Jan. 31 to Feb. 5, Feb. 7-11 interpolated. There are numerous diversions above reservoir, but Sharp Ditch is only diversion between gage and reservoir. Flow regulated by storage in reservoir. Gage-height record and results of two discharge measurements furnished by watermaster for Big Lost River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	251 243 243 255 243	212 197 190 190	48 52 52 56 56	82 85 85 85 85	96 97 97 95 98	104 104 106 106 106	104 104 104 106 109	104 104 104 104 104	674 641 614 545 496	491 471 427 302 302	243 201 186 169 159	136 136 139 139 142
6 7 8 9 10	224 186 194 201 204	39 41 41 48 50	56 58 63 63 63	85 85 85 85	98 98 98 98 9 0	106 106 106 106 106	109 109 109 109	104 104 101 95 98	422 338 298 329 365	293 281 329 347 260	152 152 169 159 139	142 146 142 142 142
11 12 13 14 15	201 197 197 190 194	37 41 39 41 41	63 65 65 65 68	85 86 86 87 87	98 98 98 98 98	106 106 106 109 109	109 109 109 109	98 98 98 101 98	356 329 293 272 302	146 149 172 220 235	136 136 133 130 133	139 139 139 139 139
16 17 18 19 20	228 228 216 201 197	41 41 41 43 41	70 70 72 72 75	57 88 89 90 90	98 101 101 101 101	109 112 112 112 109	109 109 109 109 109	9e 98 98 98 98	311 315 347 347 329	224 208 201 239 2 8 9	133 133 130 133 136	139 139 139 13 9 139
21 22 23 24 25	197 190 183 190 220	41 39 41 41 41	75 75 75 76 77	91 92 93 93 94	101 101 101 104 104	109 109 109 109 109	101 98 101 104 104	98 186 272 315 365	342 379 442 525 555	351 374 361 374 384	139 139 139 136 136	142 139 139 139 139
26 27 28 29 30 31	208 201 194 194 186 197	41 41 41 45 48	77 80 82 82 82 82	94 95 95 96 96	104 104 104 -	109 109 109 109 106 104	104 104 104 104 104	389 452 530 608 685 715	515 505 500 505 505	379 398 365 329 329 315	133 130 127 127 127 133	139 118 136 152 146

Month	Second- foot-days	Maximum	Ninimum	Mean	Rum-off in acre-feet
October	6,453 1,969 2,114	255 212 82	183 37 48	208 65.6 68.2	12,800 3,910 4,190
Calendar year 1936	70,620	925	37	193	140,100
January. February Barch. April May June June August September.	2,757 2,791 3,337 3,190 6,623 12,696 9,545 4,528 4,185	96 104 112 109 715 674 491 243 152	82 96 104 98 98 272 146 127	88.9 99.7 108 106 214 423 308 146 140	5,470 5,540 6,620 6,330 13,140 25,180 18,930 8,980 8,300
Water year 1936-37	60,188	715	37	165	119,400

Warm Spring Creek (east channel) near Mackay, Idaho

Location.- Staff gage, lat. 43°58', long. 113°45', in NE1 sec. 5, T. 7 N., R. 23 E., 500 feet above junction with west channel of Warm Spring Creek and about 72 miles northwest of Mackay.

Records available .- May 1919 to September 1937.

Average discharge. - 18 years, 28.7 second-feet.

Extremes .- Maximum discharge observed during year, 33 second-feet May 29; minimum. 13

Reserved feet Apr. 28 to May 11.

1919-37: Maximum discharge, 225 second-feet June 15, 1922; minimum, 9 second-feet May 8, 9, 13, and 14, 1919, and May 18-21, 1920.

Remarks.- Records fair. One or more gage readings each week; discharge interpolated for days of missing gage heights. Natural flow practically all diverted during inrigation season. Flow during summer represents flow from irrigation. The sum of the discharge of east and west channels of Warm Spring Creek and of east and west channels of Big Lost River represents entire flow of Big Lost River at this point and practically entire surface flow into Mackay Reservoir. Gage-height record and results of one discharge measurement furnished by watermaster for Big Lost River.

Discharge, in second-feet, water year October 1936 to September 1937

Дау	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	22 23 *23 23 23 23	25 25 25 25 25 25	23 22 21 20 *20	20 #20 20 20 20	19 19 19 19	16 16 17 17 17	17 *17 *17 17 17	*13 13 13 13 13	29 *28 25 28 *25	24 23 *22 22 22	21 22 22 23 23	22 23 23 *23 23
6 7 8 9 10	24 24 25 25 *25	25 * 25 25 25 25	20 20 20 20 20	20 20 20 *20 20	*19 19 19 18 18	*17 17 17 17 17 *17	17 16 16 16 *16	13 13 *1 3 13 13	28 25 27 *27 27	22 #22 22 22 #22	24 #24 24 24 24	24 24 25 25 26
11 12 13 14 15	25 25 24 24 23	25 25 25 *25 *25	20 20 20 20 20	20 20 20 20 20	*18 *17 *17 17	17 16 *16 16 16	16 16 15 15 14	13 14 14 14 14 *14	26 #26 26 26 25	22 22 21 *21 21	23 23 23 *23 *23	#26 26 26 26 25
16 17 18 19 20	23 *23 23 23 24	25 25 24 24 24	20 20 20 #20 20	*20 20 20 20 20	18 18 19 19 *19	16 16 16 16 *16	14 *14 14 14 14	15 16 17 17 18	*25 25 26 *26 *26	20 #20 20 20 20	23 23 22 22 22	25 25 *25 25 25
21 22 23 24 25	24 25 25 *25 *25	#24 #23 25 24 24	20 20 21 21 21	19 19 *19 19 19	19 1 8 18 17 17	16 16 16 17 17	14 14 14 *14 *14	19 *20 22 24 26	27 29 *30 31 31	#20 #19 20 #22 #22	#22 22 22 22 22 21	26 26 27 27 *27
26 27 28 29 50 31	25 25 25 25 25 25 *25	24 25 *25 25 24	*21 21 21 21 20 20	19 19 19 19 *19	16 *16 16	17 *17 17 17 17	14 14 13 13 13	*28 *30 32 *33 32 30	*32 30 28 27 *25	21 21 *20 20 21 *21	21 21 *21 21 21 22	27 27 26 26 25

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in
October	748 738 633	25 25 23	22 23 20	24.1 24.6 20.4	1,480 1,460 1,260
Calendar year 1936	10,372	75	17	28.3	20,560
January. February Mafoh. April. May. June July August. September.	608 504 513 449 578 825 657 694 756	20 19 17 17 33 32 24 24 27	19 16 16 13 25 19 21 22	19.6 18.0 16.5 15.0 18.6 27.5 21.2 22.4 25.2	1,210 1,000 1,020 891 1,150 1,640 1,300 1,380 1,500
Water year1936-37	7,703	33	13	21.1	15,290

*Gage read on these dates.

Warm Spring Creek (west channel) near Mackay, Idaho

Location.- Water-stage recorder, lat. $43^{\circ}58^{\circ}$, long. $113^{\circ}45^{\circ}$, in NE $\frac{1}{4}$ sec. 5, T. 7 N., R. 23 E., 500 feet above junction with east channel of Warm Spring Creek and about $7\frac{1}{2}$ miles northwest of Mackay.

Records available .- May 1919 to September 1937.

Average discharge. - 18 years, 90.9 second-feet.

Extremes. Maximum discharge during year, 116 second-feet July 8 (gage height, 1.28 feet); minimum, 51 second-feet Aug. 25, 26; minimum gage height, 0.74 foot Apr. 26, 27.

1919-37: Maximum discharge (estimated), 600 second-feet Aug. 11, 1936 (gage

1919-37: Maximum discharge (estimated), 600 second-feet Aug. 11, 1936 (gage height, 4.42 feet, from high-water mark); minimum, 49 second-feet Apr. 27, 1935 (gage height, 0.62 foot).

Remarks.- Records good. Discharge for Jan. 7, 8, 21, 22, 26-29 interpolated. Flow during summer represents return flow from irrigation. The sum of the discharge of east and west channels of Big Lost River represents entire flow of Big Lost River at this point and practically entire surface flow into Mackay Reservoir. Gage-height record and results of one discharge measurement furnished by watermaster for Big Lost River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	83 82 84 84 84	90 90 94 95 94	94 94 94 92 91	84 82 82 83 84	78 77 77 77 77	78 79 79 80 80	80 79 78 78 78	58 59 59 58 58	91 82 80 83 86	70 67 66 68 73	60 60 61 60 60	55 55 56 58 59
6 7 8 9 10	84 84 86 86 86	94 92 92 92 92	91 91 88 88 88	83 83 83 83 83	79 79 77 77 75	80 80 80 80	78 77 77 75 77	58 58 58 58 58	82 80 80 83 82	75 70 83 74 72	60 61 61 61 59	61 61 63 63 63
11 12 13 14 15	84 84 84 84 84	92 92 92 92	87 88 88 88 88	83 83 83 83 84	77 77 77 78 77	80 80 80 80 80	73 67 68 66 64	58 58 58 58 58	79 80 84 92 95	70 69 68 68 68	60 60 59 59 59	63 64 64 6 6 67
16 17 18 19 20	84 84 84 87 88	92 92 92 92 92	87 87 86 84 84	83 83 82 82 77	78 78 76 78 75	80 79 80 79 80	64 64 63 62 62	58 58 59 61 72	94 92 88 90 91	66 64 64 62 62	56 56 55 55 53	66 64 63 63 67
21 22 25 24 25	88 88 90 91 92	92 91 91 91 91	8 4 84 84 86 86	79 80 82 82 83	78 78 78 77 77	80 82 80 79 79	61 61 60 59 58	75 82 86 87 88	83 82 87 86 84	62 62 63 66 64	54 54 54 53 52	69 68 67 67 68
26 27 28 29 30 31	91 92 91 88 88 90	91 92 94 94 94	86 86 86 84 84	82 81 80 79 78	78 77 77 - -	78 79 79 79 80 79	56 56 58 58 56	9 2 4 9 3 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	86 83 79 77 74 -	66 63 61 59 59	52 53 54 54 56 56	68 67 67 66 64 -

Month	Second- foot-days	Maximum	Minimu	Mean	Run-off in sore-feet
October November December	2,679 2,766 2,714	92 95 94	82 90 84	86.4 92.2 87.5	5,310 5,490 5,380
Calendar year 1936	31,129	162	56	85.1	61,740
January. February March April May June June Suly August September	2,540 2,166 2,468 2,013 2,165 2,565 2,063 1,767 1,912	84 79 82 80 99 95 83 61 69	77 75 78 56 58 74 59 52 55	81.9 77.4 79.6 67.1 69.8 84.5 66.5 57.0	5,040 4,300 4,900 3,990 4,290 5,030 4,090 3,500 3,790
Water year 1936-37	27,788	99	52	76.1	55,110

Sharp Ditch near Mackay, Idaho

Location.- Water-stage recorder, lat. 43°57', long. 113°40', in sec. 12, T. 7 N., R. 23 E., 250 feet below head of ditch, half a mile below Mackay Reservoir, and 3½ miles northwest of Mackay. Staff gage at same site and datum prior to April 2.

Records available .- June 1912 to October 1914, March 1919 to September 1937.

Extremes.- Maximum discharge recorded during year, 16 second-feet May 27, 28, June 16-19; maximum gage height, 1.40 feet July 24; no flow during winter. 1912-14, 1919-37: Maximum discharge observed, 42 second-feet June 23, 1921; usually no flow during winter and other times when water is shut off.

Remarks. - Records fair. None for Oct. 25 to Nov. 21, Nov. 23-30, December and January. Discharge computed upon basis of information furnished by watermaster for Big Lost River Mar. 25 to Apr. 1, July 10-14, 16; that for June 22, Aug. 3-6 interpolated. Sharp Ditch diverts from east side of Big Lost River in SEQ sec. 12, T. 7 N., R. 23 E., 1 mile above station on Big Lost River below Mackay Reservoir, near Mackay, Idaho, and half a mile below Mackay Reservoir. Water used for irrigation of land northwest of Mackay and above Streeter Ditch. Gage-height record and one discharge measurement furnished by watermaster for Big Lost River.

Discharge, in second-feet, water year October 1936 to September 1937

7777730000					0 0 0	663333	4 4 4 4	15 15 12 12	13 13 12 11 12	7 7 6 5	2 3 4 3 4
0 0					1		4	13	12	5 5	3 4
U					0 0 0	3 3 3 3 3	3 3 2 2 2	15 14 13 14 14	12 12 12 12 12	4 3 3 2 2	5 5 6 7
2 4 4 4					00000	3 3 5 5 5	2 2 2 3	14 14 14 14 14	12 12 11 11 11	2 2 4 5	9 10 10 9 8
4 4 3 4 8					0 0 0	5 5 5 5	4 3 3 3 3	15 16 16 15 14	11 1 1 1 2	7 8 8 7 6	9 7 6 7
6 6 6	4				0 0 0 0 3	8 14 8 8	3 3 3 5	11 10 9 14 14	2 6 10 10 9	6 6 5 3	6 6 6 6
-					6 6 6 6	8 8 6 5 4	7 13 14 14 14 15	13 13 14 14 14	9 8 8 8 8	2 2 2 2 2 2	6 8 8 7 6
	444 44348 6066	4 4 4 4 3 4 8 6 6 6 -	4 4 4 4 4 4 4 4 4 4 4 8 8 6 6 6 6 6 6 6	4 4 4 4 3 4 8 6 6 6 6	4 4 4 4 4 3 3 4 8 6 0 0 6 6 6	4 4 4 4 4 4 4 4 4 4 5 4 6 6 6 6 6 6 6 6	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 4 4 0 5 5 2 14 4 4 0 5 5 2 14 4 4 4 0 5 5 2 14 4 4 4 0 5 5 3 14 4 4 4 15 16 16 16 16 16 16 16 16 16 16 16 16 16	4 4 4 4 6 0 0 5 2 14 11 11 11 4 4 4 4 4 6 0 0 5 3 14 11 11 11 11 11 11 11 11 11 11 11 11	4

Month	Second- foot-days	Měximum	Minimum	Mean	Run-off in acre-feet
October 1-24	103	8	0	4.3	204
November	-	-	-	-	-
December	-		-	<u>-</u>	
Calendar year					
January	-	-	_	-	
February	1 0	. 0	0	(0	0
March		6	0	1.3	77
April	159	. 14	3	5.3	315
May		15	2	4.9	303
June	409	16	9	13.6	811
July		1 13	1 1	9.0	555
August		8	5	4.2	258
September	191	10	2	6.4	379
Water year					

Portneuf River at Topaz, Idaho

Location. - Staff gage, lat. 42°38', long. 112°06', in sec. 23, T. 9 S., R. 37 E., at Oregon Short Line Railroad bridge, a quarter of a mile west of Topaz, 1½ miles above diversion dam of Portneur-Marsh Valley Canal Co., and 6 miles southeast of McCammon.

Records available .- January 1913 to September 1915, July 1919 to September 1937.

Average discharge. - 18 years (1913-14, 1919-22, 1923-37), 197 second-feet.

Extremes. - Maximum discharge observed during year, 358 second-feet Apr. 15 (gage height, 2.28 feet); minimum, 102 second-feet Aug. 24; minimum gage height, 0.92 foot, Aug. 24, Sept. 2, 11-13.

1913-15, 1919-37: Maximum discharge observed, 902 second-feet Apr. 3, 1913 (gage height, 6.1 feet, referred to original gage); minimum, 65 second-feet Oct. 9, 1934 (gage height, 0.31 foot).

Remarks. - Records fair. Flow regulated by storage in Portneuf-Marsh Valley Canal Co.'s reservoir near Chesterfield. Numerous ranch diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	121	126	130	119	128	182	206	249	210	196	108
2	121	121	122	119	119	130	192	214	240	214	192	104
5	119	121	119	121	122	132	198	258	202	216	192	109
4	117	121	126	122	122	132	206	249	208	202	188	109
5	117	121	128	122	134	132	218	258	212	200	188	111
6 7 8 9	117 121 121 113 115	130 134 134 134 132	130 130 128 126 130	122 122 122 122 122	126 126 124 124 122	134 136 132 134 134	222 200 182 186 198	302 294 310 326 334	214 222 222 230 230	214 214 230 230 216	182 182 182 182 176	109 109 119 111 108
11	119	138	130	122	121	140	222	310	230	210	176	104
12	117	136	119	121	121	145	226	294	228	210	180	104
13	117	134	122	121	121	145	258	285	226	214	176	104
14	113	136	126	122	126	142	326	294	216	228	176	106
14	117	134	126	122	128	142	358	285	210	240	180	106
16	113	130	130	124	124	153	326	285	206	. 228	172	108
17	113	130	126	124	124	157	310	276	202	208	164	109
18	113	138	122	122	132	151	249	267	206	208	160	108
19	117	130	122	122	136	155	240	276	212	206	151	109
20	124	130	124	122	122	155	222	267	210	206	117	109
21	132	130	122	122	126	149	226	258	208	198	113	111
22	132	130	122	122	126	155	214	240	208	192	113	111
23	132	130	124	122	124	162	206	240	198	202	113	111
24	132	130	126	122	126	151	206	240	202	196	102	111
25	132	130	126	122	126	143	194	240	210	188	106	113
26 27 28 29 30 31	121 121 117 117 119 119	128 124 124 126 126	124 128 132 130 126 128	122 122 122 122 122 129	126 126 130	157 155 155 159 162 170	206 214 218 214 202	258 249 249 249 249 258	204 210 214 220 214	192 196 192 192 158 192	106 109 109 109 111 108	113 113 113 113 119

Month	Second- foot-days	Maximum	Minimm	Mean	Run-off in acre-feet
Ostober	3,714 3,890 3,900	132 138 132	113 121 119	120 130 126	7,370 7,720 7,740
Calendar year 1936	69,501	524	102	190	137,900
January February March March April May Jun Jun Jun September	3,787 3,503 4,527 6,821 8,320 6,463 6,432 4,705 3,292	130 136 170 358 334 249 240 196	119 119 128 182 206 198 188 102 104	122 125 146 227 268 215 207 152 110	7,510 6,950 8,980 13,530 16,500 12,820 12,760 9,330 6,530
Water year 1936-37	59,354	358	102	163	117,700

Portneuf River at Pocatello. Idaho

<u>Location.</u>— Water-stage recorder, lat. 42°52', long. $112^{\circ}28'$, in sec. 27, T. 6 S., R. 34 E., at highway bridge at foot of Carson Street, in west end of Pocatello.

Records available.- August 1911 to September 1937. May 1897 to October 1899, at site 1 mile upstream.

Average discharge. - 24 years (1912-18, 1917-37), 255 second-feet.

Extremes. - Maximum discharge during year, 606 second-feet May 7, 8 (gage height, 5.33 feet); minimum discharge, 44 second-feet June 30 (gage height, 2.39 feet).
1897-99: 1911-37: Maximum discharge, in excess of 2,000 second-feet sometime during May 13 to June 14, 1917; minimum, 14 second-feet July 4-11, 13, 17, 18, 1898.

Remarks. - Records good except those for January and February, which are fair. Discharg for periods of ice effect, Dec. 4, 5, Jan. 7 to Feb. 27, computed on basis of one discharge measurement, weather records, and records for station at Topaz. Numerous diversions for irrigation above station. Flow regulated by storage reservoir near Chesterfield.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr	r,	Yay	June	July	Aug	. Se	pt.
1 2 3 4 5	116 116 114 114 118	220 227 223 220 231	225 223 222 220 225	233 233 233 233 233	*189	237 244 244 244 244	20,000	564 584 595 584 574	460 471 493 526 560	166 154 145 135 119	49 57 58 63 69		70 8 7 87 71 76	73 73 84 82 101
6 7 8 9	116 119 116 114 111	244 248 248 244 244	225 223 227 233 233	202		246 250 260 270 280	3	584 595 574 564	595 595 606 595 584	113 110 105 111 119	70 79 105 116 113	,	58 33 76 70	88 89 89 90 91
11 12 13 14 15	105 104 102 101 107	246 248 250 250 250	227 220 235 246 229		210	290 300 322 342 342	4	574 584 106 138 193	560 526 493 471 438	110 104 105 101 100	111 108 107 104 98		62 56 58 35	91 89 88 85 84
16 17 18 19 20	110 113 110 114 113	250 250 248 246 240	223 235 235 229 227	200		353 384 406 416 406	4	526 515 182 171 160	416 384 364 342 311	94 90 77 69 68	95 104 101 91 77		71 75 75 75 74	85 84 71 82 90
21 22 23 24 25	118 124 121 116 121	240 239 239 235 235	227 229 231 233 235			406 384 395 384 374	4	160 160 149 127	290 250 225 212 199	73 70 65 64 63	79 73 61 55 53		76 75 75 73 38	91 90 88 93 93
26 27 28 29 30 31	122 119 159 204 210 216	225 222 218 222 225	235 235 240 240 231 231		230 235 237 -	374 374 364 353 353 353	4	138 171 193 171 171	186 166 145 130 130	63 63 56 55 52	59 59 59 58 54 61		71 71 77 77 77 77	94 95 94 94
_)	Conth			Second foot-de		Ma	ximum .	Kinimum	Mea	n	Run-oi	
NOA	October					7,	863 127 129		216 250 246	10 21 22	8 2	25 38 30	14	,660 ,140 ,140
C	Calendar year 1936				•••••	84,	735		802	4	6 2	32	160	,100
Mar Apr May Jun Jul	January February March April May Mue Mue Mue Mue Mue Mue Mue Mue Mue Mue					5, 10, 12, 11, 2,			233 237 416 526 606 166 116	23 36 13 5 4	- 2 7 3 4 4 0 3 2	05 12 29 30 83 94.0 78.9	11, 20, 25, 23, 5,	,630 ,760 ,220 ,560 ,540 ,590 ,850

2,635

75,444

71

49

1ói

606

5,230

149,600

87.8

207

Water year 1936-37

^{*}Discharge measurement.

North Side Minidoka Canal near Minidoka. Idaho

Location. Water-stage recorder, lat. 42°40', long. 113°29', in sec. 1, T. 9 S., R. 25 E., 600 feet below head gates at Minidoka Dam and 6 miles south of Minidoka.

Records available .- May 1909 to September 1937.

Extremes.- Maximum discharge during year, 1,650 second-feet July 4, 8-9 (gage helght, 9,94 feet); no flow during winter. 1909-37: Maximum discharge, 1,670 second-feet July 11, 1932 (gage height, 9,30 feet); no flow during winter.

Remarks.- Records excellent. Flow controlled by operation of head gates. Water is diverted from Snake River at Minidoka Dam for irrigation of 62,000 acres of land under North Side Minidoka Project.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	620 652 662 658 652	285 286 286 286 286 286	332 332 288 252 253				0 0 0 0	757 757 795 888 992	983 983 981 983 981	1,570 1,620 1,640 1,650 1,640	972 1,170 1,250 1,200 1,200	1,190 1,150 1,100 1,090 1,090
6 7 8 9	651 647 641 632 628	284 278 275 274 271	254 256 257 260 98		į		39 41 41 42 110	1,100 1,220 1,320 1,440 1,510	976 974 1,050 1,100 1,160	1,640 1,640 1,650 1,650 1,640	1,240 1,280 1,330 1,360	1,080 1,080 1,080 1,030 965
11 12 13 14 15	626 611 556 514 516	267 263 254 248 248	0 0 0 0				150 190 245 247 309	1,550 1,570 1,570 1,570 1,560	1,200 1,200 1,210 1,220 1,280	1,640 1,620 1,590 1,590 1,500	1,380 1,460 1,490 1,490 1,490	958 947 939 928 932
16 17 18 19 20	471 408 406 403 362	247 245 250 254 260	0 0 0				350 350 351 351 398	1,550 1,560 1,560 1,570 1,570	1,350 1,400 1,470 1,490 1,490	1,460 1,460 1,460 1,480 1,540	1,480 1,480 1,470 1,470 1,470	934 936 932 925 862
21 22 23 24 25	305 303 302 300 298	265 271 282 289 298	0 0 0 0				460 462 463 467 467	1,570 1,570 1,570 1,570 1,560	1,480 1,480 1,470 1,480 1,430	1,590 1,600 1,600 1,590 1,590	1,480 1,470 1,470 1,440 1,430	776 746 675 672 6 58
26 27 28 29 30 31	298 296 296 296 295 291	305 310 316 323 327	0 0 0 0				592 692 736 742 753	1,580 1,610 1,600 1,530 1,260 983	1,380 1,380 1,400 1,440 1,460	1,590 1,590 1,590 1,590 1,570 1,340	1,430 1,420 1,420 1,320 1,180 1,180	649 637 649 670 722

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	14,596 8,330 2,582	662 327 332	291 245 0	471 278 83.3	28,950 16,520 5,120
Calendar year 1936	234,783	1,650	0	641	465,700
January February March April May Jun Jun July August August September	0 0 0 9,070 42,812 37,881 48,920 42,302 27,002	0 0 753 1,610 1,490 1,650 1,490	0 0 0 757 974 1,340 972 637	0 0 0 302 1,381 1,263 1,578 1,365 900	0 0 17,990 84,920 75,140 97,030 83,900 53,560
Water year 1936-37	233,495	1,650	0	640	463,100

338,100

South Side Minidoka Canal near Minidoka, Idaho

Location.- Water-stage recorder, lat. 42°40', long. 113°29', in sec. 12, T. 9 S., R. 25 E., 300 yards below head gates at Minidoka Dam and 6 miles south of Minidoka.

Records available .- April 1909 to September 1937.

Extremes.- Maximum discharge during year, 1,340 second-feet July 28-30 (gage height, 5.95 feet); no flow during winter.

1909-1937: Maximum discharge, that of July 28-30, 1937. No flow during winter.

Remarks. - Records excellent. Flow controlled by operation of head gates. Water is diverted from Snake River at Mindoka Dam for irrigation of 54,000 acres of land under South Side Mindoka Project.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Ap	r.	May	June	July	Aug	5.	Sept.
1 2 3 4 5	450 463 430 397 357	218 219 212 210 206	152 56 0 0					00000	329 333 333 335 387	568 437 414 472 508	1,290 1,300 1,300 1,300 1,280	1,1 1,0 1,0 1,0	80 20 20	1,120 1,110 1,090 1,040 939
6 7 8 9 10	348 344 342 322 309	202 198 194 184 179	0 0 0 0					00000	478 606 790 876 916	558 674 744 803 845	1,270 1,310 1,320 1,310 1,290	1,1 1,2 1,2 1,2	50 50	896 882 882 882 848
11 12 13 14 15	307 305 335 361 359	175 164 154 156 160	0 0 0 0					00000	965 1,070 1,200 1,290 1,310	848 851 848 959 1,160	1,270 1,260 1,280 1,300 1,240	1,2 1,2 1,2 1,2	10 20 30	809 776 768 776 795
16 17 18 19 20	322 266 254 252 250	157 155 157 158 159	0 0 0 0					00000	1,300 1,280 1,280 1,280 1,280	1,270 1,290 1,230 1,150 1,080	1,230 1,260 1,260 1,260 1,290	1,2 1,2 1,2 1,2	30	784 725 624 593 551
21 22 23 24 25	249 247 246 243 243	158 158 151 149 150	0 0 0					0000	1,260 1,220 1,240 1,270 1,260	1,090 1,140 1,110 1,030 1,000	1,310 1,310 1,220 1,330 1,320	1,1 1,1 1,1 1,2 1,2	70 70 10	524 498 452 395 346
26 27 28 29 30 31	243 240 240 227 219 216	151 153 151 153 156	0 0 0 0					0 0 0 0 109	1,260 1,240 1,150 1,200 814 692	1,000 1,030 1,090 1,200 1,240	1,310 1,330 1,340 1,340 1,340	1,2 1,2 1,1 1,1 1,1	90 50 40	328 359 403 439 512
)	on th			Second foot-da		Ma	K1mm	Kinimm	Mea	n		-off in
Nov	ember					9, 5,	416 147 208		480 219 152	21 14				18,680 10,210 413
0	alendar	year 193	56			178,	893		1,320		0 48	9		354,800
Feb Mar Apr May Jun Jul Aug	ruary ch il e y					27, 40, 36,	0 0 109 244 639 040 510		0 0 0 109 1,310 1,290 1,340 1,250 1,120		9 97 4 92 0 1,29 0 1,17	21 22 28		0 0 0 216 59,990 54,820 79,420 72,420 41,940
I											-1			222

170,459

Water year1936-37

1,120 1,340

467

Goose Creek above Trapper Creek, near Oakley, Idaho

Location.- Water-stage recorder, lat. 42°07', long. 113°56', in sec. 13, T. 15 S., R. 21 $\overline{\text{E., 5}}$ miles above Trapper Creek and 10 miles south of Oakley.

Records available. - April 1911 to September 1916, March 1919 to September 1937.

Average discharge. - 14 years (1911-14, 1926-37), 39.7 second-feet.

Extremes.- Maximum discharge during year, 147 second-feet May 20 (gage height, 3.04 feet);

minimum, 1.4 second-feet Aug. 25 (gage height, 1.23 feet).

1911-16, 1919-37: Maximum discharge, 670 second-feet May 18, 1921; maximum gage height (ice affected), 5.6 feet Feb. 21, 1927; no flow July 22 to Aug. 10, Aug. 22-30, 1934, Aug. 15 to Oct. 3, 1935.

Remarks. - Records good except those for period of ice effect or missing gage heights,

Nov. 22 to Mar. 17, which were computed on basis of one discharge measurement, weather
records, records for station on Trapper Creek, and records for Oakley Reservoir and
are fair. Irrigation diversions above station; flow of artesian well (completed in
1935) enters below. Practically the entire flow passing station is stored in Oakley
Reservoir. Gage-height record furnished by Oakley Canal Co.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 22 to July 9)

Oct. 1 to Nov. 21

Mar. 18 to Sept. 30

1.60	9.2	1.20	1.2	2.20	45.5
1.70	12.6	1.40	3.0	2.40	65
1.80	17.5	1.60	8.3	2,60	87
1.90	23.5	1.50	17.4	2,50	112
2.00	30.5	2.00	29.6	3.00	141

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	9.5 9.9 9.9 10	18 18 17 14 19				30 30 35 35 35	46 49 50 50 49	76 70 67 74 88	83 83 70 59 49	4.9 4.9 8.3 8.7 8.7	13 12 8.3 6.6 4.9	1.8 1.8 1.7 1.8 1.8
6 7 6 9 10	11 11 11 11 12	20 19 18 17 17			18	35 40 40 40 40	49 49 46 46 46	98 112 115 118 129		9.6 12 13 18 19	4.3 4.1 3.8 3.6 3.2	1.9 2.1 2.3 2.2 2.1
11 12 13 14 15	13 13 12 12 13	1e 22 21 23 21			 	40 45 45 50 50	46 47 48 51 57	129 118 123 125 125	46 47 51 47 45	18 17 16 16 17	2.9 2.7 2.6 2.3 2.1	2.9 2.4 2.3 2.1 2.1
16 17 18 19 20	13 13 13 14 19	20 22 21 21 20				55 60 66 61 53	63 68 73 70 69	132 136 134 128 134	43 40 38 33 28	15 14 15 15 13	2.0 2.0 1.9 2.1 2.6	2.1 2.2 2.2 2.1 2.3
21 22 23 24 25	24 19 18 18 18	20 20 20 20 20			22	55 53 51 48 46	67 68 67 64 65	126 116 102 97 92	27 14 7.6 7.6 5.6	12 11 10 9.6 8.3	2.1 1.8 1.6 1.6	2.6 3.2 3.4 3.6 3.8
26 27 28 29 30 31	17 17 17 17 18 18	19 18 18 18] -	45 44 43 43 42 44	63 65 87 97 85	82 80 68 69 80 80	5.6 5.6 5.6	7.6 7.3 6.9 6.6 5.9 5.2	1.5 1.6 1.6 1.7 1.8 1.8	4.1 4.3 4.3 4.3
\vdash					L	Second				<u> </u>	Ru	n-off in

Month	Second- foot-days	Maximum	Winimum	Mean	Run-off in acre-feet
October	442.3 577 527	24 23 -	9.5 14 -	14.3 19.2 17.0	877 1,140 1,050
Calendar year1936	13,474.4	217	4.4	36.8	26,730
January. February March. April May June June July August September.	560 1,399 1,800 3,223 1,071.7 354.5 105.6	66 97 136 83 19 13	30 46 67 4.9 1.5	16.0 20.0 45.1 60.0 104 35.7 11.4 3.41 2.66	984 1,110 2,770 3,570 6,390 2,130 703 209 158
Water year 1936-37	10,636.0	136	1.5	29.1	21,090

Oakley Reservoir near Oakley, Idaho

Location.- Staff gage immediately above right abutment of dam on Goose Creek, lat. $\frac{42^{\circ}12^{\circ}}{12^{\circ}}$, long. $113^{\circ}55^{\circ}$, in sec. 19, T. 14 S., R. 22 E., 4 miles southwest of Oakley.

Records available .- October 1912 to September 1937.

Extremes.- Maximum contents observed, 17,000 acre-feet June 13, 15 (gage height, 65.7 feet); minimum, 1,310 acre-feet Sept. 27 (gage height, 19.02 feet).

1913-37: Maximum contents, 74,600 acre-feet June 15, 1921 (gage height, 136.2 feet); reservoir drained at close of season in 1915, 1919, 1920, 1926, and 1933.

Remarks.- Zero of gage corresponds to elevation of bottom of diversion tunnel and Zero capacity. Gage height 136.0 feet corresponds to elevation of crest of spillway and capacity of 74,350 acre-feet. Water is used for irrigation of lands along Goose Creek in Oakley Canal Co. project. Gage-height record and table of storage capacity furnished by Oakley Canal Co.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	3,810	3,300 - 3,480	4,850 - - 5,090	6,480 6,700	8,210	9,680	13,200 13,300	16,400	16,400	13,900	8,000	3,420
6 7 8 9 10	2,100	1111	1111	1111	8,400 - - -	10,100	14,000	16,600	16,400	-	7,010	2,560
11 12 13 14 15	2,260 2,360	- - - 4,080	- - - 5,590	7,430	- - - 8,780	11,100	14,600	16,700	17,000 17,000	11,700	- - - 6,060	2,300
16 17 18 19 20		11111	5,610 - - - -	11111	= = = = = = = = = = = = = = = = = = = =	11,900	15,000	16,600	16,900 16,700	11,000	-	1,800
21 22 23 24 25		11111	1111	1111	-	12,300	15,300	16,600	15,600	9,330	4,600 - - -	
26 27 28 29 30 31	11111	11111	11111		9,570	12,900	16,000	16,100	15,100	11111	11111	1,310

Trapper Creek near Oakley, Idaho

Location.- Water-stage recorder, lat. 42°10', long. 113°59', in sec. 34, T. 14 S., R. 21 E., 4 miles above Oakley Dam and 7 miles southwest of Oakley.

Records available .- May 1911 to September 1916; March 1919 to September 1937.

Average discharge. - 13 years (1911-12, 1913-14, 1926-37), 13.4 second-feet.

Extremes. Maximum discharge during year, 38 second-feet May 19 (gage height, 5.15 feet); minimum discharge, 5.2 second-feet Dec. 4 (gage height, 4.71 feet).
1911-18, 1919-37: Maximum discharge recorded, 98 second-feet May 28, June 8, 1921; a higher flow may have occurred during cloudburst about midnight Aug. 15, 1931; minimum discharge probably occurs during winter.

Remarks.- Records good. Discharge for periods of ice effect or missing gage heights, Dec. 11-15, Dec. 31 to Mar. 15, computed on basis of weather records, and records for stations on Goose Creek and Oakley Reservoir records. Discharge for July 7-12 interpolated. A few small diversions above station; flow of artesian well completed in 1936 enters above. Practically entire flow passing gage is stored in Oakley Reservoir. Gage-height record furnished by Oakley Canal Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	9.4 9.4 9.4 10	9.4 9.4 11	11 13 11 9.4 12			12 12 12 12 12	14 14 14 14 14	25 25 27 28 31	31 29 27 26 25	15 13 13 13 13	13 11 10 10 10	9.0 9.0 9.0 9.0 9.4
6 7 8 9 10	10 9.4 9.4 10	11 11 11 11 11	12 12 12 12 11			12 12 12 12 12	14 14 14 14 15	33 32 32 33 33	24 23 23 22 22	13 13 13 13 12	10 10 10 10 9.4	9.4 9.0 9.0 9.0 5.6
11 12 13 14 15	10 10 10 11 9.4	11 11 11 11 11	11 11 11 11			12 12 12 12 12	15 16 17 19 20	35 35 36 37 36	22 21 21 20 20	12 12 12 12 12	9.4 9.4 9.4 8.6 9.0	5.6 8.6 8.6 8.6 8.6
16 17 18 19 20	11 11 11 13 12	12 12 12 12 12	12 12 12 12 12			13 13 12 12 14	20 20 20 20 20	37 37 37 38 37	19 19 18 18	11 11 11 11 10	9.0 9.0 8.1 7.7 7.7	8.1 8.1 8.1 8.1 9.0
21 22 23 24 25	11 10 10 9.4 9.4	12 11 11 11 12	12 12 12 12 12			13 13 13 12 12	21 22 21 20 22	36 35 32 32 33	18 17 17 17 16	9.4 9.4 10 10 12	8.1 8.1 9.0 9.0 9.0	9.0 9.0 8.6 9.0 9.0
26 27 28 29 50 51	11 11 11 11 11	12 12 12 13 13	12 12 12 12 12 12			12 13 13 13 14 14	22 23 25 25 24	33 32 30 30 32 33	16 16 15 15 15	12 10 11 11 13 13	8.6 9.0 9.0 9.0 8.6	9.0 9.0 9.0 9.0 9.4

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	321.2 340.8 361.4	13 13 13	9.4 9.4 9.4	10.4 11.4 11.7	637 676 717
Calendar year 1936	5,778.2	47	-	15.8	11,460
January. February March. April May June July August September September	386 553 1,021 610 365.8	14 25 38 31 15 13	12 14 25 15 9.4 7.7 8.1	11 12 12.5 18.4 32.9 20.3 11.8 9.25 8.83	
Water year 1936-37	5,187.7	38	7.7	14.2	10,300

P. A. Lateral near Milner, Idaho

Location.- Staff gage, lat. 42°32', long. 114°01', in sec. 22, T. 10 S., R. 21 E., 600 feet below pumping station and 22 miles northeast of Milner.

Records available .- April 1919 to September 1937.

Extremes.- Maximum discharge during year, 62 second-feet on many days; no flow on many days.

190-37: Maximum discharge. 64 second-feet May 11-13, 1920 and July 11-12, 19-29, 1932; no flow on many days.

 $\frac{\text{Remarks.-} \ \text{Records excellent.} \ \ \text{Flow regulated by operation of pumping plant, which}}{11fts \ \text{water from Snake River for irrigation in North Side Twin Falls tract.}}$

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dea.	Jan.	Feb.	Mar.	Apr.	Жау	June	July	Aug.	Sept.
1 2 5 4 5		0 0 0 0						0 0 14 15 32	62 62 62 62 62	61 61 61 61	62 62 62 62 62	60 60 60 60
6 7 8 9 10		0 0 0						32 52 58 60 60	62 62 62 62 62	60 60 60 61 60	62 62 62 62 62	60 60 60 60 60
11 12 15 14 15		0 0 0 0						62 62 62 62 62	62 62 62 62 61	60 60 60 61 61	62 62 61 60 60	60 60 60 60
16 17 18 19 20		0 0 11 15 4						62 62 62 62 62	61 61 61 61	61 61 61 61 61	60 61 61 61 61	58 57 56 53 52
21 22 23 24 25		0 0 0 0						62 62 62 62 62	61 61 61 61	61 61 61 61	61 61 61 61	50 46 45 38 33
26 27 28 29 50 31		000001						62 62 62 62 62 62	61 61 61 61	61 61 62 62 60	61 61 61 61 61	32 30 30 29 28

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0 30 0	0 15 0	0 0 0	0 1.0 0	0 60 0
Calendar year 1936	9,101	62	0	24.9	18,060
January.	0	0 0 0	0 0 0	0 0 0	0
MarchAprilMay	1,625	0 62 62	0 0 61	0 52.4 61.5	
JuneJulyAugust	1,900	62 62	60 60	60.8 61.3	3,740 3,7 7 0
September	1,537 8,821	60	28	24.2	3,050 17,500
•	l '				

77794 0-38-6

Milner Low Lift Canal near Milner, Idaho

Location.- Water-stage recorder, lat. 42°31', long. 114°01', in sec. 32, T. 10 S., R. 21 E., 600 feet below head of canal and $1\frac{1}{2}$ miles south of Milner.

Records available .- June 1921 to September 1937.

Extremes.- Maximum discharge during year, 172 second-feet July 19-25; no flow on many days.
1921-37: Maximum discharge, 174 second-feet July 7, 1936 (gage height 3.67 feet); no flow on many days.

Remarks.- Records good. Flow controlled by operation of pumping plant, which lifts water from Snake River above Milner Dam for irrigation of 8,000 acres of land in Milner Low Lift irrigation district.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3							0	0	132	152	150	127
2			1	i e	1		0	0	136	150	150	116
2					l		0	34	140	150 148	152 152	127 128
4 5					İ		0	87 112	144 144	148	150	127
١,٠					1	1	"	112	144	140	100	151
6					İ.	}	0	115	143	157	150	126
7 1					١ '		ŏ	130	132	161	149	127
8							l ŏ l	138	132	146	151	127
9						1	l ó l	137	150	162	152	126
10							0	155	120	161	153	127
11							0	155	150	160	153	127
12			1	1	i	\	o	154	151	161	137	126
13			1		1		ا ة ا	154	152	162	113	126
14					1		0	155	144	166	119	126
15					l		0	152	136	164	154	125
16					İ		ا ه	154	135	166	151	125
17			1		l	1	0	154	124	168	148	126
18			1		ĺ		0	154	125	169	126	127
19		l .	1		1	1	0	152	124	172	151	126
20					ł		0	153	119	172	155	108
21							ا ه	152	110	172	154	78
22				[ſ	f I	0 1	150	122	172	154	78 79 79
23						i	0	147	123	172	154	79
24						l .	0	148	124	172	127	79
25							0	147	125	172	126	79
26					ļ		0	147	124	171	126	79
27			l	İ	İ		20	146	124	168	126	79
28				l	l		6	147	149	167	125	80 80
29 50					l	١.	0	148	150	169	126	80
31					ĺ		0	143	150	166	126	79
21					ĺ		-	119	-	156	127	-

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October. November. December.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Calendar year 1936	21,514	174	0	58.8	42,770
January. February Barch. April May June June July August Beptember.	0 0 0 26 4,039 4,034 5,052 4,387 3,290	0 0 0 20 155 152 172 155	0 0 0 0 110 146 113 78	0 0 0.87 130 134 163 142 110	0 0 52 8,010 8,000 10,020 8,700 6,530
Water year 1936-37	20,828	172	0	57.1	41,310

Gooding Canal at Milner, Idaho

Location. Water-stage recorder on Milner-Gooding Canal in SW $_2$ sec. 7 and staff gages on North Side Canal Co. diversion in secs. 18 and 19, T. 10 S., R. 21 E., about 3 miles below head gates that are in sec. 28, T. 10 S., R. 21 E., lat. 42° 31', long, $114^{\circ}01'$.

Records available .- May 1930 to September 1937.

Extremes.- Maximum discharge during year, 2,250 second-feet Aug. 2-3; no flow on many days.

1930-37: Maximum discharge, 2,270 second-feet July 29-31, 1936; no flow on many days.

Remarks. - Records good. Gooding canal diverts water from Snake River for Milner-Gooding project of U. S. Bureau of Reclamation and in part for the North Side Canal Co. project. The latter project also receives water through the North Side Twin Falls Canal and P. A. Lateral. Records are computed by combining the discharge of the Milner-Gooding diversion and North Side Canal Co. diversion below their division point and adding from 15 to 25 second-feet to that sum for loss between head gates and division point.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5		0 0 0 0					0 0 0 0	599 764 993 1,200 1,430	1,590 1,580 1,860 1,880 1,590	1,850 1,580 1,910 1,910 1,910	2,220 2,250 2,250 2,210 2,190	1,780 1,780 1,760 1,720 1,710
6 7 8 9 10		0 0 0 0 140					0 0 0 0 381	1,610 1,700 1,770 1,770 1,780	1,870 1,850 1,830 1,840 1,870	1,910 1,920 1,930 1,920 1,890	2,110 2,080 2,090 2,030 2,020	1,710 1,690 1,660 1,630 1,630
11 12 13 14 15		470 507 491 462 117					326 517 581 614 6 25	1,770 1,780 1,780 1,790 1,790	1,850 1,810 1,790 1,800 1,800	1,920 1,950 1,950 1,960 1,980	2,020 2,010 1,980 1,980 1,970	1,630 1,630 1,630 1,630 1,620
16 17 18 19 20		0 0 0 0					631 612 762 889 910	1,790 1,790 1,780 1,800 1,810	1,790 1,800 1,810 1,830 1,840	1,980 1,970 1,960 1,960 1,960	1,980 1,990 1,970 1,980 1,980	1,630 1,620 1,640 1,620 1,630
21 22 23 24 25		0 0 0 0					1,060 1,170 1,170 1,250 1,260	1,790 1,790 1,790 1,800 1,830	1,840 1,810 1,790 1,800 1,850	1,960 2,040 2,140 2,210 2,220	1,980 1,980 1,980 1,960 1,960	1,630 1,630 1,600 1,620 1,610
26 27 28 29 30 31		0000					1,260 1,240 800 586 592	1,880 1,900 1,880 1,860 1,900	1,870 1,860 1,860 1,830 1,830	2,210 2,230 2,230 2,230 2,220 2,220	1,950 1,950 1,930 1,950 1,840 1,780	1,600 1,580 1,580 1,280 880

		(looding Car	nal		Distribution	a (acre-feet)
Month	Second- foot days	Maximum	Minimum	Mean	Acre-feet	To Milner Gooding project	To North Side Canal Co. project
October November December	0 2,187 0	0 507 0	0 0	0 72.9 0	4,340 0	4,340 0	0 0 0
Calendar year 1936	291,177	2,270	0	796	577,500	336,600	240,900
January February Haroh April Hay June July August Soptember	0 0 0 17,236 51,816 55,120 62,530 62,570 48,360	0 0 1,260 1,900 1,890 2,230 2,250 1,780	0 0 0 599 1,790 1,850 1,780 980	0 0 575 1,671 1,837 2,017 2,018 1,612	0 0 0 34,190 102,800 109,300 124,000 124,100 95,920	0 0 0 10,320 60,050 66,270 75,350 67,360 42,570	0 0 0 23,870 42,730 43,060 48,670 56,750 53,350
Water year 1936-37	299,819	2,250	0	821	594,700	326,300	268,400

North Side Twin Falls Canal at Milner, Idaho

Location.- Water-stage recorder, lat. 42°32', long. 114°01', in sec. 20, T. 10 S., R. 2I E., half a mile north of Milner and three-quarters of a mile below head gates at Milner Dam.

Records available .- May 1909 to September 1937.

Extremes.- Maximum discharge during year, 2,990 second-feet July 14; no flow

April 10-16. 1909-37: Maximum discharge, 3,200 second-feet July 5-7, 29-31, 1921, May 15, 1928, June 2, July 23, 1929; no flow on many days.

marks.- Records excellent except those for January and February, which are good. Discharge for periods of ice effect, Jan. 1, 3-6, 11, 12, 14-17, 19-25, 27, Feb. 7-9 estimated or interpolated. Flow controlled by operation of head gates. Water diverted by this canal and by P. A. Lateral, and part of that diverted by Gooding Canal, all at Milner, is used for irrigation of 170,000 acres of land under North Side Canal Co. system.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	708	655	488	420	314	281	392	476	2,280	2,700	2,750	2,080
2	708	664	491	419	314	281	374	761	2,410	2,690	2,760	1,890
3	705	422	494	420	317	264	491	1,030	2,380	2,710	2,710	1,850
4	705	499	488	420	326	264	645	1,070	2,410	2,750	2,650	1,800
5	701	604	485	420	329	262	691	1,180	2,350	2,770	2,630	1,500
6	705	597	488	420	332	256	651	1,440	2,260	2,860	2,640	1,770
7	698	597	488	422	330	256	570	1,650	2,290	2,880	2,660	1,710
8	698	597	485	422	327	253	422	1,780	2,250	2,850	2,700	1,670
9	691	591	485	422	325	256	201	1,900	2,260	2,810	2,690	1,660
10	688	591	488	422	323	262	0	1,950	2,210	2,840	2,680	1,620
11	695	597	482	420	305	256	0 0 0	1,980	2,140	2,850	2,670	1,560
12	698	594	476	418	287	256		2,180	2,100	2,890	2,680	1,460
13	698	588	470	416	284	262		2,260	2,210	2,950	2,670	1,270
14	688	588	479	416	267	264		2,290	2,230	2,990	2,690	1,190
15	695	585	476	416	245	267		2,350	2,230	2,940	2,670	1,170
16	695	582	464	416	237	270	0	2,500	2,180	2,920	2,650	1,180
17	695	560	458	416	237	276	0	2,650	2,220	2,950	2,620	1,150
18	726	563	461	383	242	264	100	2,620	2,220	2,950	2,630	1,110
19	743	539	446	382	262	273	161	2,610	2,270	2,960	2,650	1,060
20	743	539	446	381	273	287	159	2,570	2,280	2,970	2,630	1,080
21	746	539	446	380	287	317	159	2,540	2,250	2,940	2,580	1,060
22	757	536	446	379	273	326	159	2,540	2,240	2,950	2,570	1,040
23	750	539	443	378	276	317	159	2,600	2,360	2,890	2,510	1,010
24	746	530	440	376	284	320	228	2,650	2,490	2,810	2,400	781
25	715	521	446	375	305	344	375	2,630	2,580	2,770	2,380	350
26 27 28 29 30 31	688 684 684 684 681 678	512 503 494 488 482	458 449 440 431 428 422	374 374 374 356 355 320	305 296 281 - -	365 368 377 383 380 377	496 629 574 364 326	2,610 2,620 2,580 2,520 2,590 2,330	2,540 2,500 2,540 2,560 2,580	2,790 2,800 2,810 2,840 2,790 2,790	2,320 2,300 2,280 2,280 2,220 2,180	251 214 179 163 161

Month	Second- foot-days	Maximum	Minimus	Mean	Run-off in acre-feet
October	21,896 16,705 14,387	757 664 494	678 422 422	706 557 464	43,430 33,130 28,540
Calendar year 1936	449,510	2,890	0	1,228	891,600
January February Harch April May June July July August September	69,790	422 332 383 691 2,650 2,580 2,990 2,760 2,080	320 237 253 0 476 2,100 2,690 2,180	397 292 296 278 2,112 2,326 2,852 2,563 1,176	24,380 16,230 18,220 16,510 129,800 138,400 175,400 157,600 69,990
Water year 1936-37	429,369	2,990	0	1,176	851,600

South Side Twin Falls Canal at Milner, Idaho

 $\underline{Location}$. Water-stage recorder, lat. 42°31', long. 114°01', in sec. 29, T. 10 S., R. 21 E., 700 feet below head gates at Milner.

Records available .- May 1909 to September 1937.

Extremes.- Maximum discharge during year, 3,640 second-feet July 26 (gage height, 10.30 feet); minimum, 68 second-feet April 4 (gage height, 1.61 feet). 1909-1937: Maximum discharge, 4,600 second-feet Aug. 12, 1918; no flow Sept. 20, 1920.

Remarks. - Records excellent except those for period of ice effect, Jan. 6 to Feb. 23, which were computed on basis of one discharge measurement, observer's record of head-gate changes, and stages of Milner Lake and are good. Flow controlled by operation of head gates. South Side Twin Falls Canal diverts water from Snake River at Milner Dam for irrigation of 202,000 acres of land in Twin Falls County.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	How.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	1,610 1,600 1,590 1,600 1,600	672 675 678 678 672	672 675 675 672 672	640 640 628 637 634	568 568	515 501 478 49s 529	270 76 71 68 69	2,070 2,240 2,430 2,620 2,670	2,850 3,040 3,090 3,090 3,090	3,350 3,380 3,420 3,420 3,460	3,590 3,570 3,560 3,510 3,510	3,240 3,250 3,190 3,160 3,160
6 7 8 9 10	1,600 1,560 1,530 1,470 1,480	672 675 432 40 102	672 668 634 625 628	620		520 520 526 529 529	77 260 1,660 1,120 662	2,760 2,970 3,170 3,200 3,210	3,020 2,970 2,970 3,040 3,070	3,530 3,560 3,510 3,460 3,460	3,530 3,500 3,520 3,530 3,530	3,130 3,010 2,e90 2,760 2,660
11 12 13 14 15	1,480 1,480 1,480 1,470 1,480	141 329 665 675 668	625 628 628 628 625 634)	565	532 526 526 526 523	675 665 710 825 964	3,220 3,250 3,260 3,260 3,300	3,060 3,010 3,090 3,060 3,000	3,460 3,470 3,550 3,520 3,480	3,520 3,520 3,530 3,550 3,560	2,500 2,460 2,460 2,460 2,460
16 17 18 19 20	1,470 1,450 1,430 1,430 1,360	668 668 668 662 672	643 631 622 622 628			523 523 532 544 547	982 989 978 989 996	3,280 3,340 3,280 3,340 3,350	2,900 2,570 2,790 2,740 2,740	3,460 3,500 3,540 3,590 3,610	3,560 3,560 3,550 3,560 3,560	2,450 2,440 2,440 2,440 2,410
21 22 23 24 25	1,210. 1,060 935 858 858	672 672 668 672 672	625 619 619 625 637	> 560	562 553	544 556 553 529 532	1,060 1,210 1,290 1,360 1,420	3,340 3,350 3,360 3,360 3,330	2,730 2,790 2,910 2,950 3,060	3,610 3,590 3,570 3,610 3,610	3,540 3,530 3,530 3,530 3,530	2,280 2,130 1,890 1,790 1,670
26 27 28 29 30 31	819 768 764 761 720 707	668 672 672 672 675	634 634 631 631 634		556 538 515 -	547 547 535 577 640 665	1,600 1,940 2,060 1,790 1,830	3,320 3,320 3,300 3,240 3,300 2,820	3,280 3,240 3,280 3,320 3,350	3,640 3,630 3,630 3,630 3,630 3,610	3,500 3,460 3,400 3,410 3,360 3,280	1,590 1,590 1,590 1,590 1,590

Month	Second- foot-days	Maximum	Minimu	Kean	Run-off in acre-feet
October	39,630 17,827 19,805	1,610 678 675	707 40 619	1,278 594 639	78,600 35,360 39,280
Calendar year 1936	643,498	3,620	45	1,758	1,276,000
January. February March. April May June June June June June June June June	18,159 15,725 16,672 28,666 96,260 90,400 109,490 108,890 72,680	- 665 2,060 3,360 3,360 3,640 3,590 3,250	478 68 2,070 2,730 3,350 3,280 1,590	586 562 538 956 3,105 3,013 3,532 3,513 2,423	36,020 31,190 33,070 56,860 190,900 179,300 217,200 216,000 144,200
Water year 1936-37	634,204	3,640	68	1,738	1,258,000

Rock Creek near Twin Falls. Idaho

Location.- Water-stage recorder, lat. 42°36', long. 114°32', in SW 1/4 sec. 36, T. 9 S., R. 16 E., at highway bridge, 3 miles above mouth and 4 miles northwest of Twin Falls. Prior to Sept. 27, 1937 at site 100 feet upstream, datum 1.50 feet higher.

Records available .- March 1922 to September 1937.

Average discharge. - 15 years, 214 second-feet.

Extremes. Maximum discharge during year, 514 second-feet Apr. 29 (gage height, 2.36 feet); minimum, 102 second-feet Apr. 8 (gage height, 0.48 foot), 1922-37: Maximum discharge, 984 second-feet Sept. 21, 1927 (gage height, 4.5 feet, from high-water marks); minimum, 94 second-feet Mar. 22, Apr. 1-3, 11, 12, 1935.

Remarks. - Records good except those for two of the periods of missing gage heights,

Jan. 9-28, Jan. 31 to Feb. 14, which were estimated and are poor. Those for the
other periods of missing gage heights were computed as follows: For Mar. 14, 15,
17-22, on basis of gage-height trend Mar. 13, 16, 23; for Apr. 9-11, on basis of
gage-height record Apr. 8, 12 and records for Twin Falls South Side Canal. Normal
summer flow practically all diverted for irrigation several miles upstream. Waste
water from South Side Twin Falls Low Line Canal, which crosses Rock Creek 12 miles
(revised) above, causes abrupt fluctuations in stage at times. Irrigation wastes
and drain discharges from project lands enter above gage. Gage-height record furnished by Murtaugh Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3	247 245	222 213	162 *165	139 151)	310 310	110 110	#388 #288	345 273	*192 *191	229 226	254 261
4 5	247 *245 *242	206 217 220	168 166 168	215 226 238		285 254 224	110 109 109	188 209 164	266 261 254	*190 *189 *187	224 226 224	264 266 266
6 7 8 9	*240 235 240 *240 *241	215 209 202 198 217	169 169 168 161 153	242 252	320	211 209 209 196 204	108 105 104 200 200	140 142 144 154 158	254 240 226 231 224	*186 *185 *184 *183 182	215 213 216 211 211	271 269 264 *257 *249
11 12 13 14 15	*241 *241 *242 242 242	220 233 182 182 • 184	150 150 153 159 159	275	315	226 229 229 225 225	200 202 202 211 206	145 144 134 134 136	224 224 224 226 217	188 186 186 202 200	209 213 213 209 206	242 245 242 242 257
16 17 18 19 20	245 240 242 247 247	184 178 178 178 184	156 146 148 148 140	300	298 290 *295 *300 *305	182 170 170 170 170	217 215 213 206 140	140 145 150 154 158	217 220 222 222 224	198 200 202 198 196	211 217 222 222 226	254 259 259 266 261
21 22 23 24 25	242 238 231 231 229	184 188 184 180 177	142 140 140 144 144	325	*310 *315 320 300 *303	170 170 169 168 164	133 132 123 112 124	151 154 154 158 171	229 211 204 204 194	196 198 204 *206 *209	*223 220 224 233 226	264 259 247 236 238
26 27 28 29 30 31	224 215 213 220 220 220	186 178 177 173 171	*143 *142 *141 *140 *139 138	340 332 330	*307 310 308 - -	154 154 154 156 156 156	115 121 271 488 488	168 169 177 182 254 298	194 198 198 194 *193	*211 *213 *215 *218 220 231	233 233 245 247 *249 *252	240 238 236 233 226

Nonth	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,337 5,820 4,711	247 233 169	213 171 138	237 194 152	14,550 11,540 9,340
Calendar year 1936	78,464	693	97	214	155,600
January February Barch April Bay Bay Jua Jua Jua Jua Laga Laga Laga Laga Laga Laga Laga La	8,756 6,179 5,384 5,451 6,813 6,146	310 488 398 345 231 252 271	139 - 154 104 134 193 182 206 226	283 313 199 179 176 227 198 223 252	17,390 17,370 12,260 10,680 10,810 13,510 12,190 13,740 15,000
Water year1936-37	79,854	488	104	219	158,400

^{*}Interpolated.

Salmon Falls Creek near San Jacinto, Nev.

Location.- Water-stage recorder, lat. 41°57', long. 114°42', in sec. 23, T. 47 N., R. 64 E., in canyon 200 yards below highway bridge, 250 yards below mouth of Shoshone Creek and 5 miles north of San Jacinto.

Records available. - September 1909 to September 1916; October 1918 to September 1937.

Average discharge. - 23 years (1910-16, 1919-20, 1921-37), 120 second-feet.

Extremes.- Maximum discharge during year, 362 second-feet May 7 (gage height, 4.40 feet);

minimum, 10 second-feet Sept. 17 (gage height, 2.22 feet).

1909-16, 1919-37: Maximum discharge, 1,280 second-feet May 22, 1912 (gage height, 7.5 feet); minimum discharge, 9.8 second-feet Aug. 4, 1931; minimum gage height, 2.20 feet Sept. 7, 1934.

Remarks.- Records good except those for period of missing gage heights, December 30 to January 30, which were computed on basis of weather records, and records for Salmon River Canal Co. Reservoir and for stations on nearby streams and are fair. Numerous diversions for irrigation above station. Salmon Dam of Salmon River Canal Co., 15 miles below station, forms a reservoir having a capacity of about 180,000 acre-feet. Gage-height record furnished by Salmon River Canal Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oot.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	38 39 40 40 40	52 53 48 52 52	42 53 42 45 46		44 44 45 45 47	72 74 75 74 74	99 108 119 126 131	228 228 237 266 307	276 281 246 208 184	49 50 43 40 39	17 16 17 16 17	14 14 14 14 14
6 7 8 9 10	41 41 48 46 46	52 53 53 52 52	54 58 56 59 58		48 49 49 48 49	75 80 83 86 85	129 119 119 121 127	342 357 352 344 334	168 154 146 163 167	39 38 47 52 53	18 18 16 16	16 15 16 15 14
11 12 13 14 14	46 47 47 47 47	52 52 52 52 52 52	50 44 46 51 56	40	50 51 52 54 54	83 85 86 89 90	138 141 145 161 186	322 312 293 257 257	154 145 129 124 124	51 49 49 51 49	16 16 15 14 14	14 13 13 14 14
16 17 18 19 20	47 48 47 48 50	53 53 54 54 53	58 55 55 53 54	1	53 55 58 55 54	96 100 108 106 100	221 269 264 241 232	262 283 295 288 290	113 92 80 79 72	48 47 45 43 40	14 15 15 15 14	13 11 11 11 11
21 22 25 24 25	51 50 50 50 52	53 53 52 50 49	55 55 56 55 56		60 62 62 64 67	98 98 94 94 92	230 243 243 228 208	286 269 239 219 219	66 54 52 45 41	38 37 32 23 23	14 14 14 14 14	12 11 12 13 13
26 27 28 29 50 31	52 52 52 52 52 52	48 44 46 44 49	46 59 50 45 45 45	44	69 69 69 -	92 92 92 90 90 94	198 206 237 255 243	232 246 243 226 232 252	39 37 43 46 50	28 21 20 19 18 17	14 14 14 14 14 14	14 14 16 21 28

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,458 1,534 1,602	52 54 59	38 44 42	47.0 51.1 51.7	2,890 3,040 3,180
Calendar year 1936	45,649	789	18	125	90,530
January February Marcih Marcih April May June July August September	1,244 1,526 2,747 5,467 8,517 3,578 1,198 469 425	69 108 269 357 281 53 18 28	44 72 99 219 37 17 14	40.1 54.5 e8.6 183 275 119 38.6 15.1	2,470 3,030 5,450 10,880 16,890 7,100 2,380 930 843
Water year 1936-37	29,785	. 357	11	81.6	59,080

Salmon River Canal Co. Reservoir near Rogerson, Idaho

Location.- Staff gage attached to upstream face of concrete dam on Salmon Falls Creek, lat. 42°13', long. 114°44', in sec. 17, T. 14 S., R. 15 E., 10 miles west of Rogerson. Zero of gage is 4,990.0 feet above mean sea level.

Records available. - January 1922 to September 1937. Regulation began May 1910.

Extremes. - Maximum contents, 37,250 acre-feet June 13 (gage height, 24.0 feet); minimum, 2,905 acre-feet Sept. 30 (gage height, 2.3 feet).

1922-37: Maximum contents, 123,700 acre-feet May 30, 31, 1922 (gage height, 61.1 feet); minimum, 125 acre-feet Sept. 21 to 0ct. 5, 1934 (gage height, 0.1 foot).

Remarks. - Reservoir has a capacity of 182,650 acre-feet between gage height 0.0 and 80.0 feet (4,990.0 and 5,070.0 feet above sea level). Water is used for irrigation of lands in Salmon River Canal Co. project. Gage-height record and table of storage capacity furnished by Salmon River Canal Company, Ltd.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,740	6,212	7,068	9,242	10,480	12,500	17,020	25,320	33,830	29,400	9,098	3,985
2	5,740	6,212	7,140	9,315	10,480	12,640	17,100	25,840	34,290	28,640	8,155	3,650
3	5,740	6,280	7,212	9,315	10,480	12,780	17,250	26,260	34,750	27,790	7,720	3,850
4	5,200	6,348	7,285	9,388	10,760	12,930	17,480	26,680	35,120	26,940	7,720	3,850
5	4,862	6,348	7,285	9,460	10,840	13,080	17,700	26,940	35,400	26,090	7,720	3,782
6	4,930	6,415	7,358	9,532	10,910	13,220	17,920	27,450	35,770	25,070	7,720	3,782
7	4,930	6,550	7,430	9,605	11,060	13,290	18,150	28,040	36,140	23,960	7,068	3,715
8	4,930	6,550	7,502	9,605	11,200	13,440	18,380	28,640	36,320	22,860	6,482	3,715
9	4,998	6,622	7,575	9,605	11,200	13,510	18,620	29,240	36,600	21,840	5,875	3,715
10	4,998	6,622	7,648	9,605	11,200	13,660	18,780	29,830	36,880	20,860	5,470	3,648
11	5,065	6,280	7,720	9,750	11,200	13,800	18,940	30,420	37,060	19,900	5,065	3,648
12	5,065	6,145	7,792	9,750	11,200	13,950	19,100	30,940	37,160	18,940	4,660	3,580
13	5,200	6,010	7,865	9,895	11,200	14,100	19,260	31,440	37,250	18,220	4,525	3,512
14	5,200	6,010	7,938	9,968	11,340	14,250	19,580	31,980	36,700	17,550	4,525	3,445
15	5,268	6,078	8,010	9,968	11,420	14,400	19,900	32,440	36,140	17,700	4,525	3,445
16	5,335	6,145	8,082	9,968	11,490	14,550	20,220	32,900	35,310	17,700	4,525	3,378
17	5,402	6,212	8,155	9,968	11,490	14,700	20,540	33,270	34,480	17,700	4,458	3,378
18	5,470	6,280	8,228	9,966	11,640	14,850	20,660	33,740	33,640	17,700	4,390	3,310
19	5,538	6,280	8,300	9,968	11,710	15,000	21,340	34,200	32,900	17,700	4,390	3,310
20	5,538	6,348	8,372	10,180	11,780	15,300	21,840	34,660	32,160	17,100	4,390	3,242
21	5,605	6,482	8,445	10,180	11,850	15,450	22,260	35,220	31,360	16,200	4,322	3,242
22	5,605	6,550	8,518	10,180	11,850	15,600	22,350	35,680	30,760	15,300	4,322	3,175
23	5,672	6,622	8,590	10,180	11,920	15,750	22,520	36,140	30,080	14,320	4,255	3,175
24	5,740	6,695	8,735	10,180	12,070	15,900	22,690	35,680	29,740	13,290	4,188	3,108
25	5,808	6,768	8,888	10,180	12,140	16,050	23,200	35,220	29,740	12,350	4,120	3,108
26 27 28 29 30 31	5,008 5,875 5,942 6,010 6,078 6,078	6,840 6,918 6,918 6,995 7,068	8,952 9,025 9,098 9,098 9,170 9,170	10,180 10,180 10,260 10,480 10,480	12,220 12,280 12,350	16,200 16,350 16,500 16,650 16,800 16,880	23,540 23,800 24,050 24,480 24,900	34,750 34,290 33,830 33,270 32,810 33,460	29,740 29,740 29,740 29,660 29,580	11,780 11,780 11,780 11,780 11,780 10,910 9,968	4,120 4,120 4,120 4,052 3,985 3,985	3,040 3,040 2,972 2,972 2,905

Salmon River Canal Co. Canal near Rogerson, Idaho

Location. - Water-stage recorder, lat. 42°15', long. 114°45', in sec. 7, T. 14 S., R. 15 E., half a mile below Salmon River Canal Co. Reservoir and 7 miles west of Rogerson.

Records available .- April to September 1937.

Extremes.- Maximum discharge during year, 533 second-feet July 8 (gage height, 6.90 feet); no flow for long periods.

Remarks.- Records good. Discharge for Apr. 21-23, May 23, 30, June 11, 13, 23, 29, July 1, 13, 19, 25, 29, Aug. 2, 6, 12, computed on basis of reported gate changes. Gageheight record and 10 discharge measurements furnished by Salmon River Canal Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5							0 0 0 0	0 0 0	0 0 0 0	335 413 434 467 489	445 293 0 0	
6 7 8 9 10							0000	0 0 0 0	0 0 0	522 511 511 500 500	194 275 266 226 178	
11 12 13 14 15							0 0 0	0 0 0	43 66 292 423 434	478 393 344 0 0	158 116 0 0	
16 17 18 19 20							0 0 0 0	0 0 0 0	445 456 445 434 413	0 0 0 307 423	00000	
21 22 23 24 25							190 223 4 0 0	0 0 295 434 413	403 323 287 0	467 522 522 489 402	0 0 0 0	
26 27 28 29 30 31							000001	456 434 403 403 144 0	0 0 54 71	0 0 320 423 434	00000	

Month	Second- foot-days	Maximm	Minimus	Mean	Run-off in acre-feet
October					
Calendar year					
Jenuary February March March May 11 May June June May May May May May May May May May May	417 2,982 4,589 10,206 2,151	223 456 456 522 445 0	0000	13.9 96.2 153 329 69.4 0	827 5,910 9,100 90,240 4,270
The period					40,350

Big Wood River at Hailey, Idaho

Location. - Water-stage recorder, lat. 43°31', long. 114°20', in SW\u00e4 sec. 9, T. 2 N., R. 18 E., at steel highway bridge, a quarter of a mile southwest of Hailey.

Drainage area .- 640 square miles.

Records available .- June 1915 to September 1937.

Average discharge. - 22 years, 272 second-feet.

Extremes. - Maximum discharge during year, 890 second-feet May 6 (gage height, 4.12 feet);

minimum, 0.2 second-foot Feb. 11 (gage height, 0.76 foot).

1915-37: Maximum discharge, 3,560 second-feet June 12, 1921 (gage height, 8.66 feet, present datum); practically no flow Sept. 15-23, Nov. 20, 22, 23, 1931.

Remarks. - Records good except those below 10 second-feet, which are fair. Discharge for Nov. 29, Jan. 9, 10, Sept. 2 interpolated. Water diverted around station by Halley power plant and returned to river through Big Wood Slough. Total flow of river at Halley (combined flow of Big Wood River and Big Wood Slough) is given in table on following page. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	3 3 3 3 3	2 1 1 1	1 1 1 1	0 0 1 0	0 0 0 0	1 1 1 1 0	1 1 1 1 2	249 346 478 595 735	474 422 474 536 447	153 141 128 122 120	26 26 27 18 6	2 2 2 2 2
6 7 8 9 10	3 2 2 2	1 1 1 1	1 1 1 1	1 1 1 1	0 0 0 0	0 1 1 0	2 2 2 2 3	785 685 640 685 735	375 332 353 402 353	153 122 133 180 135	5 4 4 4	.2 1 1 1
11 12 13 14 15	2 2 2	1 1 1 1	2 2 3 3 3	1 1 1 1	0 0 0 0	1 0 1 1	3 3 6 15 48	685 640 640 685 760	307 255 237 234 240	116 86 48 48 47	4 4 4 3	1 1 1 1
16 17 18 19 20	222	1 1 1 2	3 3 3 2	0 1 1 1	0 0 0 0	1 1 1 1	243 304 271 220 174	735 760 810 785 662	265 314 297 294 304	46 45 45 43 33	3 3 2 2	1 1 1 1
21 22 23 24 25	2 2 2 2	2 2 2 2 2	3 3 3 3	1 1 0 0	0 0 0 0	1 1 1 1	220 211 187 160 144	595 685 735 710 735	387 447 443 338 249	22 22 22 22 22	20000	1 1 1 1
26 27 28 29 30 31	888888	2 2 1 0	3 4 3 3 1 0	0 0 0 0	0 0 1 -	1 1 1 1	211 324 321 262 217	735 735 785 760 640 546	209 211 237 220 172	24 25 25 25 25 25 26	ଷ ଷ ଷ ଷ ଷ ଷ ଷ	1 1 1 1

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
Ostober	68	3	2	2.2	135
November	38	2	0	1.3	75
December	66	4	0	2.1	131
Calendar year 1936	73,950	1,800	0	202	146,700
January	19	1	0	0.6	38
February	1	1 1	0	l 0	2
March	26	l ī	l ō	.a	52 52
April	3.561	324	1 1	119	7.060
May	20.756	810	249	670	41,170
June	9.828	536	172	328	19,490
July	2,204	180	22	71.1	4.370
August	177	27	1 ~	5.7	351
September	37	ີ້ຂ	ĩ	1.2	73
Water year 1936-37	36,781	810	0	101	72,950

Combined discharge, in second-feet, of Big Wood River and Big Wood Slough at Hailey, Idaho, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	136	124	87	98	113	116	133	406	621	343	136	96
2	136	117	89	77	116	110	135	515	558	329	134	92
3	137	103	87	80	116	105	135	647	622	311	130	93
4	136	113	83	113	115	99	133	769	698	299	124	95
5	130	112	83	103	113	98	140	892	591	295	126	101
6	116	112	86	96	109	110	141	933	520	347	127	100
7	123	111	91	91	109	110	132	857	484	298	130	98
8	130	110	93	91	109	111	135	814	517	317	126	93
9	130	113	97	96	112	110	140	865	591	388	127	93
10	127	111	93	106	105	113	141	924	518	322	132	95
11	127	112	91	106	119	120	143	867	471	285	130	93
12	128	117	91	115	120	121	148	815	432	261	129	94
13	128	117	93	106	112	129	170	806	406	250	130	91
14	129	114	97	101	122	126	223	856	402	250	122	90
15	127	114	100	101	112	126	295	936	414	245	117	89
16	122	115	103	100	112	127	371	907	452	226	109	89
17	121	119	106	101	112	126	334	932	496	214	107	87
18	120	111	108	101	119	133	296	988	449	204	104	88
19	125	110	107	101	118	122	277	963	444	193	104	87
20	127	108	106	101	109	126	296	824	466	174	110	9 3
21	127	112	109	101	126	119	355	742	586	164	112	100
22	126	115	112	101	111	127	346	826	669	163	108	95
23	128	112	112	10 1	118	124	317	909	626	155	108	93
24	126	110	112	100	106	116	290	868	492	152	110	95
25	127	110	113	100	109	116	291	901	395	150	108	97
26 27 28 29 30 31	133 134 132 129 130 123	105 101 95 90 88	99 106 103 90 88 111	100 100 100 110 114 110	106 109 110	120 123 124 124 128 128	355 460 448 389 363	897 900 961 931 806 705	374 379 396 397 367	157 145 136 134 137 136	114 103 105 105 105 100	97 94 93 92 94

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
Ostober	3,970 3,301 3,046	137 124 113	116 88 83	128 110 98.3	7,870 6,550 6,040
Calendar year 1936	120,577	1,960	83	329	239,200
January. February March. April My My My My My My My My My My My My My	3,121 3,167 3,687 7,532 25,962 14,833 7,180 3,632 2,807	115 126 133 460 988 698 388 136	77 105 98 132 406 367 134 100	101 113 119 251 837 494 232 117 93.6	6,190 6,280 7,310 14,940 51,490 29,420 14,240 7,200 5,570
Water year 1936-37	82,238	988	777	225	163,100

Big Wood River near Bellevue. Idaho

Location.- Water-stage recorder, lat. 43°19', long. 114°21', in sec. 20, T. 1 S., R. 18
E., 1% miles above flow line of Magic Reservoir, 3 miles above Camas Creek, and 10 miles southwest of Bellevue.

Drainage area. - 823 square miles.

Records available .- July 1911 to September 1937 except for winters.

Extremes. - Maximum discharge during year, 680 second-feet May 6 (gage height, 2.67 feet); minimum discharge recorded during period of record, 26 second-feet Apr. 20. 1911-37: Maximum discharge, 3,660 second-feet June 16, 1921 (gage height, 6.07 feet); minimum, 7 second-feet Apr. 14, 1932 (gage height, 1.10 feet).

Remarks. - Records good. Discharge for Apr. 5, 6 interpolated. No records Dec. 4 to Mar. 26. Numerous diversions for irrigation above station. Gage-height record and seven discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	How.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	46	33			_	70	173	227	78	46	38
2	49	44	33			-	77	214	166	73	46	38
5	49	44	33			-	68	323	162	75	46	36
4	49	42	-			-	64	440	200	75	47	38
5	49	42	-			-	55	529	185	73	46	40
6	49 49	44	-			-	46	630	143 116	77	46	3 e
7	49	44	-			-	38	630	116	77	46	40
Θ	49	42	-			-	44	588	102	84	44	40
.9	49	42	-			- !	51	588	122	90	49	40
10	49	40	-			-	49	596	127	90	46	42
11 12 13 14	49	40	-			_	51	562	110	84	42	46
12	49	40	-			- 1	49	512	100	84	42	40
13	49	42				- 1	49	456	94	84	42	40
15	49 51	42	- 1			- 1	57	440	82	84	44	38
10	91	42	-			-	47	456	75	82	44	40 40 58 38
16 17	51	42	-			- 1	40	425	80	75	46	36
18	51 51	42	-		1	-	34	374	102	73	44	36
19	53	42 40	-			- !	51	323	110 105	73	42	36 36 36 38
20	55	40	-			-	31	329	105	70	40	3 6
		₩0	-			-	28	287	100	62	3 8	3 8
21	53 53	38	-			-	28	204	108	62	36	41
23	53	38 38	-			- 1	33	170	166	62	36 38	47
24	51	36 36	- 1			i - i	57	227	169	64	36	46
25	51	36	-			-	70	256	127	62	36	44
~'	OT.	36	-			-	70	287	92	59	3 6	46
26	51	34	-			-	77	367	73	59	34	44
27	49	34	-			30	133	403 403	66	55	54	44
28	47 47	34	-			34	200	403	64	53	36	44 42
30	47	34 33	-			36	196	418	75	47	38	44
31	46	20	-			40	173	341	73	46	38	42
	40		-			53		266	-	44	38	

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in aore-feet
October November December	1,546 1,197	55 46 -	46 33 -	49.9 59.9	3,070 2,370
Calendar year					
January. February Barchi 27-53. April. Bay June July August September.	195 2,016 12,217 3,541 2,171	- 53 200 630 227 90 49	- 30 28 170 64 44 34	38.6 67.2 394 118 70.0 41.5 40.4	- 383 4,000 24,230 7,020 4,310 2,550 2,410
Water year					

Magic Reservoir near Richfield, Idaho

Location.- Lat. 43°15', long. 114°22', in NE\SE\ sec. 18, T. 2 S., R. 18 E., 18 miles northwest of Richfield. Observations are referred to an assumed datum which is about 137 feet lower than sea level.

Drainage area. - 1,500 square miles.

Records available. February 1909 to September 1937. Prior to Apr. 4, 1909, gage-height record only is available. Practically no storage prior to July 14, 1909.

Extremes. - Maximum contents during year, 172,100 acre-feet May 18 (gage height, 4,929.85 feet); minimum, 39,480 acre-feet Sept. 30 (gage height, 4,875.25 feet).

1909-37: Maximum contents, 192,080 acre-feet May 18, 1927 (gage height, 4,935.14 feet); no storage for several days in 1909, 1919, 1920, 1924, 1928, and 1935.

Remarks. - Water is stored in this reservoir for irrigation of lands under Carey Act project of the Big Wood Canal Co. Available capacity of the reservoir is about 191,500 acre-feet between gage beights 4,821.5 and 4,835.0 feet. Gage-height record and table of contents furnished by watermaster for Big Wood and Little Wood Rivers.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3	92,400 92,520 92,520	94,620 94,730 94,730	93,680 93,600 93,800	95,800 95,910 96,030	98,170 98,290	100,800 101,000 101,000	106,000	156,300 157,300 158,300 159,600	166,500	138,800 137,600 136,400 135,100	98,170 96,740 95,320 93,920	62,050 61,070 60,290 59.320
5	92,520 92,630	94,850 94,850	93,920 93,920	96,030 96,030		101,100		161,000	164,400	133,900	92,630	58,550
6 7 8 9	92,750 92,750 92,750 92,870	94,970 94,970 94,970 95,090	94,030 94,030 94,150 94,150	96,270 96,270 96,270 96,270	98,890 99,010 99,130	101,200 101,300 101,300 101,400	108,800 109,400 109,900	162,500 164,100 165,700 166,900	163,000 162,200 161,300	132,800 131,600 130,500 129,400	91,250 89,990 88,640 87,400	57,780 57,010 56,240 55,480
10 11 12	92,870 92,870 92,980	95,090 95,200 95,320	94,270 94,270 94,380	96,500 96,500 96,500	99,250 99,250	101,400 101,600 101,600	113,300	168,800 169,500	158,800	128,300 127,200 126,000	84,850 83,640	54,720 53,970 53,220
13 14 15	92,980 93,100 93,220	95,440 95,560 95,560	94,380 94,380 94,500	96,500 96,740 96,740	99,490 99,740	101,700 101,900 101,900	116,800 119,400	170,100 170,800 171,300	156,800 155,900	124,800 123,600 122,200	82,450 81,260 80,090	52,470 51,730 50,990
16 17 18 19 20	93,330 93,450 93,450 93,570 93,680	95,680 95,800 95,320 94,500 93,680	94,500 94,620 94,620 94,730 94,730	96,980 96,980 97,100 97,220 97,220	99,860 99,980 99,980	102,000 102,200 102,300	122,700 128,300 133,900 137,700 140,400	171,900 172,100 171,900	154,000 153,000 152,000	121,000 119,500 118,200 116,800 115,400	75,820 77,670 76,520 75,390 74,250	50,250 49,520 48,700 47,880 47,160
21 22 25 24	93,680 93,800 93,920 93,920	92,980 93,100 93,220 93,220	94,850 94,970 95,090 95,200	97,220 97,220 97,220 97,570	100,200 100,300 100,500 100,500	102,700 102,700 102,800 102,900	142,700 144,400 146,100 148,000	171,500 171,200 170,400 169,900	150,100 149,100 148,100 147,000	113,900 112,600 111,200 109,800	73,130 72,010 70,890 69,790	46,440 45,730 45,020 44,320
25 26 27 28	94,030 94,030 94,150 94,270	93,330 93,330 93,330 93,450	95,320 95,320 95,440 95,560	97,690 97,690	100,700		151,300	169,200 168,000 168,700		105,600	68,680 67,680 66,690 65,690	42,840 42,070 41,300
29 30 31	94,380 94,500 94,500	93,450 93,570	95,680 95,680 95,680	97,930 98,930 98,170	=	103,800 104,000 104,100			141,200 140,000	102,700 101,300 99,620	64,800 63,820 62,930	40,460 39,460

Big Wood River below Magic Dam, near Richfield, Idaho

Location. - Water-stage recorder, lat. 43°14', long. 114°22', in sec. 18, T. 2 S., R. 18 E., half a mile below Magic Dam and 18 miles northwest of Richfield.

Records available .- April 1911 to September 1937.

Average discharge. - 25 years (1912-37), 371 second-feet.

Extremes. Maximum discharge during year, 772 second-feet July 17-24, July 26 to Aug. 3; maximum gage height, 4.16 feet July 22, 23, 26, 28, 29; minimum discharge 8 second-feet Sept. 30; minimum gage height recorded, 1.64 feet Jan. 2.
1911-37: Maximum discharge, 5,070 second-feet May 18, 1911 (gage height, 9.2 feet); no flow Feb. 3, 1915.

Remarks.- Records good. Discharge for Jan. 3 to Feb. 3 and Feb. 5 to Mar. 20 inter-polated. Numerous ranch diversions in upper drainage area. Flow completely regulated by gates at Magic Dam. Gage-height record and ten discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Rating table, water year 1936-57 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Oct. 1 to Nov. 17, Aug. 14 to Sept. 30)

1.4	4	2.8	185
1.6	9	3.0	245
1.8	16	3.2	315
2.0	31	3.4	395
2.2	57	3.6	485
2.4	91	4.0	690
2-6	133	1.9	800

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	13 12 12 12 12	13 12 12 11 11	11 11 11 11 11	10 10 10 10 10	11 11 11 11 11	11 11 11 11 11	11 11 11 11 11	14 14 14 14 54	575 550 540 545 545	690 690 690 684 684	772 772 772 745 718	472 472 472 467 468
6 7 8 9 10	12 12 12 12 12	11 11 11 10 10	11 11 11 10 10	10 10 10 10 10	11 11 11 11 11	11 11 11 11 11	11 11 11 11 11	185 172 174 233 312	555 585 595 595 595	684 684 690 684 679	690 690 718 690 679	431 418 408 400 400
11 12 13 14 15	12 12 13 13 13	10 10 10 10 10	10 10 10 10 10	10 10 18 10 10	11 11 11 11 11	11 11 11 11 11	11 11 12 12 12	335 335 335 335 355	595 595 595 595 595	674 674 690 718 718	679 679 690 668 652	395 395 391 379 363
16 17 18 19 20	13 13 13 13 13	10 182 383 408 408	10 10 10 10 10	10 10 10 11 11	11 11 11 11 11	11 11 11 11 11	12 12 12 13 13	400 440 472 480 495	610 630 640 640 640	745 772 772 772 772 772	646 635 625 625 620	367 391 408 404 408
21 22 23 24 25	13 13 13 13 13	177 12 11 11 11	10 10 10 10 10	11 11 11 11 11	11 11 11 11 11	11 11 11 11 11	13 13 13 13 13	520 535 550 560 575	625 615 646 679 71e	772 772 772 772 772 7 4 5	615 615 595 575	400 391 387 383 383
26 27 28 29 30 31	13 13 13 13 13 13	11 11 11 11 11	10 10 10 10 10 10	11 11 11 11 11 11	11 11 11 -	11 11 11 11 11 11	14 14 14 14 14	595 615 620 625 625 605	718 718 718 690 690	772 772 772 772 772 772 772	550 530 530 525 510 485	395 408 413 418 186

Month	Second- foot-days	Maximum	Minimm	Mean	Run-off in acre-feet
October	392 1,830 318	13 408 11	12 10 10	12.6 61.0 10.3	778 3,630 631
Calendar year 1936	85,443	750	8	253	169,500
January February Karch April May June June July August September	308 341 365 11,593 18,627 22,631	11 11 11 14 625 718 772 772 472	10 11 11 14 540 674 485 186	10.4 11.0 11.0 12.2 374 621 730 641 402	641 611 676 724 22,990 36,950 44,890 39,410 25,950
Water year 1936-37	88,661	772	10	245	175,900

Big Wood River above North Gooding Canal, near Shoshone, Idaho

- Location. Staff gage, lat. 43°06', long. 114°18', in sec. 10, T. 4 S., R. 18 E., 1 mile above North Gooding Canal, 13 miles below Magic Dam, and 14 miles northeast of Sheebone
- Records available .- April 1921 to September 1937.
- Extremes. 1921-37: Maximum discharge, 3,330 second-feet June 13, 1921 (gage height, 12.79 feet, former datum); no flow for long periods.
- Remarks. No flow during year ending Sept. 30, 1937. Numerous diversions for irrigation. Richfield and Lincoln Canals are main diversions between station and Magic Dam, Lincoln Canal, completed in spring of 1925, diverts all the flow, except during high water, around station on right bank to conserve channel losses in the natural stream bed. Flow regulated by diversions above station and by operation of head gates at Magic Dam.

Big Wood River below North Gooding Canal, near Shoshone, Idaho

- Location. Starf gage, lat. 43°04', long. 114°18', in sec. 15, T. 4 S., R. 18 E., 300 yards below Morth Gooding Canal, 11 miles northeast of Shoshone, and 14 miles below Magic Dam.
- Records available.- Jamuary 1911 to September 1937. No flow during 1929, 1931, 1934, 1935, 1936, and 1937.
- Extremes. 1911-37: Maximum discharge, 3,180 second-feet May 18, 1911 (gage height, 15.0 feet, former datum); no flow for long periods.
- Remarks.- No flow during year ending Sept. 30, 1937. Numerous diversions for irrigation.

 North Gooding, Richfield, and Lincoln Canals divert water between station and Magic
 Dam. Since completion of Lincoln Canal in 1925, which diverts 7 miles upstream, most
 of river flow has been diverted above station.

Big Wood River at Gooding, Idaho

- Location.- Water-stage recorder, lat. 42°57', long. 114°43', in NE{NE} sec. 31, T. 5 S., R. 15 E., 30 feet below highway bridge and half a mile north of Gooding.
- Records available.- April 1921 to September 1937 except for winters. From June 1896 to October 1899, at station at approximately same site but known as "Malade River at Toponis, Idaho".
- Extremes.- Maximum discharge during year, 324 second-feet Apr. 28 (gage height, 2.92 feet);

 probably no flow for long periods.
 1921-37: Maximum discharge, 2,340 second-feet May 7, 1922 (gage height, 5.80 feet);
 no flow for long periods of each year.

Remarks. - Records good. No record Oct. 1 to Mar. 31. Numerous diversions for irrigation above and below station. Flow regulated by Magic reservoir upstream and may be affected also by deliveries from Milner-Gooding canal diverting from Snake River. Gageheight record and 13 discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oot.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5							20 62 22 12 5	8 0 0 0 27	111 109 107 92 97	58 51 45 50 56	83 83 85 88 80	28 33 38 36 34
6 7 8 9 10							9 10 12 11 11	88 129 148 168 141	101 97 90 95 95	52 51 50 46 42	83 76 78 81 80	43 48 46 45 42
11 12 13 14 15							8 9 14 42 43	113 123 126 107 97	105 111 105 95 90	41 39 44 46 50	68 70 74 69 57	39 40 43 45 46
16 17 18 19 20							25 11 5 9	95 90 85 143 219	88 88 94 99 103	56 57 60 61 61	56 52 51 50 49	48 43 59 40 58
21 22 25 24 25							4 81 134 163 148	130 88 83 78 78	99 66 74 52 49	61 62 61 58 65	51 52 52 51 50	38 44 44 38 42
26 27 28 29 30 31							160 180 243 271 92	80 83 83 81 99 103	54 70 81 70 66	75 74 76 78 80 83	46 45 41 40 41 42	46 51 49 50 49

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
Calendar year					
January. February March. April May. June July August September.	1,831 2,892 2,673 1,791	271 219 111 83 88 51	4 0 49 39 40 28	61.0 93.3 89.1 57.8 62.1 42.2	3,630 5,740 5,300 3,550 3,820 2,510
The period					24,550

Big Wood River near Gooding, Idaho

Location. Water-stage recorder, lat. 42°54', long. 114°48', in sec. 21, T. 6 S., R. 4 E., at Hudson ranch, 2 miles downstream from bridge on Bliss-Gooding highway, 32 miles downstream from Little Wood River, 5 miles above diversion dam for King Hill project, and 6 miles southwest of Gooding.

Records available .- March 1916 to September 1937 except for winters.

Extremes. - Maximum discharge during year, 1,500 second-feet Mar. 14 (gage height, 6.29 feet); no flow for short periods.
1916-37: Maximum discharge, 3,680 second-feet Mar. 17, 1922 (gage height, 9.00 feet); no flow for some periods of each year.

Remarks. - Records good; none for Dec. 27 to Jan. 27 and Jan. 29 to Mar. 5. Discharge for Apr. 20 interpolated. Diversions for irrigation above and below station. Flow regulated by Magic reservoir upstream and may also be affected by deliveries from canals diverting from Snake River at Milner. Gage-height record April to September and 10 discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers; gage-height record October to March furnished by North Side Canal Co., Ltd.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Oct. 1 to Mar. 5)

0.0	0	3.2	307
.4	1.1	3.6	397
.8	6.2	4.0	503
1.2	23.5	4.4	625
1.6	58	4.8	763
2.0	103	5.2	919
2.2	132	5.6	1,103
2.4	163	6.0	1,320
0 8	০খ :	6 3	1 500

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	25 23 19 18 12	67 97 94 101 68	63 40 42 22 14				126 249 124 52 61	142 26 14 5	118 111 102 89 84	44 26 25 30 42	26 36 35 39 39	20 34 36 32 31
6 7 8 9 10	10 9 9 6 5	30 84 68 61 70	11 19 20 57 62			31 35 41 54 62	43 52 54 57 60	73 158 199 211 196	94 93 72 73 81	37 33 33 30 25	40 39 38 48 47	29 37 31 31 32
11 12 13 14 15	2 1 0 1 8	76 72 62 80 108	52 31 20 5 5			168 350 1,100 816 435	71 61 53 106 111	136 122 141 124 111	90 118 122 114 98	27 23 22 24 20	30 19 19 20 12	20 13 16 14 14
16 17 18 19 20	15 15 19 20 20	120 83 51 40 45	15 28 42 33 31			385 373 235 184 132	75 53 40 44 42	83 73 64 81 206	99 102 104 107 106	20 22 26 28 25	15 18 16 20 28	16 14 14 19 15
21 22 23 24 25	63 20 29 33 40	62 79 86 65 46	23 19 23 19 18			111 93 83 85 75	40 59 182 236 268	118 63 35 26 28	103 84 69 58 49	23 20 20 19 20	32 32 32 36 34	15 23 29 26 25
26 27 28 29 50 31	46 52 60 59 68 54	35 37 42 60 57	15 - - - -	*0		72 72 85 91 88 95	339 307 373 435 297	44 43 42 41 75 116	51 68 78 68 58	26 22 22 24 23 24	26 22 16 16 22 33	22 32 38 83 52

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	791 2,046 729	84 120 63	0 30 5	25.5 68.2 28.0	1,570 4,060 1,450
Calendar year					
January February Barch 6-21 April Bay June July August September	5,351 4,100 2,797 2,663 808	1,100 435 211 122 44 48 83	31 40 1 49 19 12 13	206 137 90.2 88.8 26.1 28.5 27.1	10,610 8,132 5,550 5,280 1,600 1,760 1,610
Water year					

^{*}Observation by engineers.

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Big Wood Slough at Hailey. Idaho

Location. Water-stage recorder, lat. 43°31', long. 114°19'30", in sec. 9, T. 2 N., R. 48 E., at highway bridge, an eighth of a mile northeast of steel highway bridge across Big Wood River, and an eighth of a mile southwest of Hailey.

Records available .- June 1915 to September 1937.

Average discharge .- 22 years, 109 second-feet.

Extremes. Maximum discharge during year, 301 second-feet Apr. 15; maximum gage height, 5.55 feet during period of missing gage heights, Jan. 20-23 (elevation of top of ice in well); minimum discharge, 19 second-feet Apr. 19 (gage height, 1.29 foot). 1915-37: Maximum discharge observed, 419 second-feet June 6, 1921; maximum gage height, that of Jan. 20-23, 1937; practically no flow May 8, 1931.

Remarks.- Records good except those for periods of ice effect, Jan. 6-9, 14-28, which Were computed on basis of gage heights, observer's notes, weather records, and records for stations on nearby streams and are fair. Staff gage read once daily Dec. 26 to Jan. 7, Jan. 10-19, 24-29. Flow regulated by operation of Hailey power plant half a mile upstream. Big Wood Slough, a natural channel of Big Wood River, is utilized as a tailrace for the power plant, and its discharge plus the discharge of Big Wood River at Hailey equals the total flow of river at this point. One discharge measurement furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-fest, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	133	122	86	98	113	115	132	157	147	190	110	94
2	133	116	88	77	116	109	134	169	136	158	108	90
3	134	102	86	79	116	104	134	169	148	183	103	91
4	133	112	82	113	115	98	132	174	162	177	106	93
5	127	111	e2	102	113	98	138	157	144	175	120	99
6	113	111	85	95	109	110	139	148	145	194	122	95
7	121	110	90	90	109	109	130	172	152	176	126	96
8	128	109	92	90	109	110	133	174	164	184	122	92
9	128	112	96	95	112	110	138	180	189	208	123	92
10	125	110	92	105	105	113	138	189	165	187	128	94
11 12 15 14 16	125 126 126 127 125	111 116 116 113 113	89 89 90 94 97	105 114 105	119 120 112 122 112	119 121 128 125 125	140 145 164 208 247	182 175 166 171 176	164 177 169 168 174	169 175 202 202 198	126 125 126 118 114	92 93 90 89 88
16	120	114	100		112	126	128	172	187	180	106	88
17	119	118	103		112	125	30	172	182	169	104	86
18	118	110	105		119	132	25	178	152	159	102	87
19	123	109	104		118	121	57	178	150	150	102	86
20	125	106	104		109	125	122	162	162	141	108	92
21	125	110	106	> 100	126	118	135	147	199	142	110	99
22	124	113	109		111	126	135	141	222	141	106	94
25	126	110	109		118	123	130	174	183	133	106	92
24	124	108	109		106	115	130	158	154	130	108	94
25	125	108	110		109	115	147	166	146	128	106	96
26 27 28 29 30 31	131 132 130 127 128 121	103 99 94 89 88	96 102 100 87 87 111	110 114 110	106 109 109 -	119 122 123 123 127 127	144 136 127 127 146	162 165 176 171 166 159	165 168 159 177 195	133 120 111 109 112 110	112 101 103 103 103 98	96 93 92 91 93

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October. November. December.	3,902 3,263 2,980	134 122 111	113 88 82	126 109 96.1	7,740 6,470 5,910
Calendar year 1936	46,613	230	16	127	92,450
January Pebruary Barch Jar 1 Jar 1 Jar 2 Jar 2 Jar 2 Jar 3 Jar 3 Jar 3 Jar 3 Jar 3 Jar 3 Jar 3 Jar 4 Jar 4 Jar 5 J	3,102 3,166 3,661 3,971 5,206 5,005 4,976 3,455 2,770	126 132 247 189 222 208 128 99	105 98 25 141 136 109 95 86	100 113 118 132 168 167 161 111 92.5	6,150 6,280 7,260 7,880 10,330 9,930 9,870 6,850 5,490
Water year 1936-37	45,457	247	25	125	90,160

Camas Creek near Blaine, Idaho

cation. - Water-stage recorder in sec. 15, T. 1 S., R. 16 E., a quarter of a mile north of Macon siding on Hill City branch of Oregon Short Line Railroad, 11 miles below railroad bridge, 21 miles above backwater of Magic Reservoir, and 4 miles southeast

Drainage area. - 618 square miles.

Records available. May 1912 to September 1937 except for winters. Discharge measurements only for 1922.

Extremes.- Maximum discharge during year, 3,610 second-feet Apr. 16 (gage height, 10.12 feet); minimum discharge recorded, 1.7 second-feet Aug. 16-21; minimum gage height, 0.92 foot Aug. 19-21.

1912-37: Maximum discharge, 7,490 second-feet Apr. 21, 1936 (gage height, 14.3 feet, from high-water mark); minimum discharge, 1.6 second-feet July 10, 11, 13, Aug. 25-29, 31, 1931, and Aug. 18-20, 1934 (gage height, 0.90 foot).

Remarks. - Records good. Discharge interpolated Aug. 13-18. No record Nov. 8 to Mar. 24.

Many small diversions above station. No regulation. Gage-height record and seven measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1936 to September1937

Day	Oct.	How.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.9	4.0				-	62	349	71	4.7	2.0	1.9
2	2.9	3.9				-	6e	300	66	4.6	1.9	1.9
3	2.9	3.7				-	80	288	60	4.4	1.9	1.9
4	2.9 2.9	3.7 3.7				-	106	282	54	4.2 4.0	1.9	1.9
5	2.9	3.7			l	-	161	282	48	4.0	1.8	2.0
6	2.9	4.0				-	173	285	38 31	4.0	1.8	2.0
7	2.9	4.0			l	-	106	300		4.2	1.8	1.9
8	2.9	-			l	-	122	278	29	4.4	1.8	2.0
10	3.1 3.1	-			l	-	200	252	3C	4.2	1.8	1.9
10	3.1	-				-	282	235	30	4.4	1.8	1.9
11	3.1	-			1	 -	364	218	27	4.4	1.8	1.9
12	2.9	-			1	-	490	208	25	3.7	1.8	1.9
13	2.9	-			1	-	740	195	30	3.5	1.8	1.8
14	2.9	-				-	1,030	171	32	3.4	1.8	1.8
15	2.9	-				-	1,550	154	32	3.5	1.8	2.2
16	2.9	_				l -	2.400	161	31	3.2	1.7	1.9
17	2.9	-				l -	3,050	161	30	2.9	1.7	1.9
18	3.1	-			1	-	2,120	154	28	3.1	1.7	1.9
19	6.8	-			1	-	1,550	148	26	2.8	1.7	1.9
20	4.7	-			1	-	1,150	145	24	2.6	1.7	2.0
21	4.0	_			1	l <u>-</u>	1.070	135	23	2.3	1.7	2.0
22	4.0	-				-	828	120	18	2.3	1.8	2.0
23	3.9	-				-	810	113	14	2.3	1.9	2.0
24	3.9	-			1		688	102	11 _	2.3	1.9	2.0
25	3.9	-				14	625	93	9,4	2.3	1.9	2.0
26	3.9	_				15	490	93	7.6	2.2	1.9	2.0
27	3.9	-			ĺ	16	391	88	6.8	2.0	1.9	2.0
28	3.9	-			I	18	394	84	6.2	2.0	1.9	2.0
29	3.7	-		l	l	19	445	78	5.7	2.0	1.9	2.0
50	3.9	-	i	l	1	21	430	75	4.9	1.9	1.9	2.4
51	4.0	-		l	ĺ	45	1	71	-	2.0	1.9	-

	1	Month		Second- foot-days	Maximum	Minimu	Mean	Run-off in
October November 1 December	-7		. .	 107.5 27.0	6.8 4.0	2.9 3.7	3.47 3.86	213 54 -
Calendar	year							
January February March 25-3 April May June July August Beptember.	1		· · · · · · · · · · · · · · · · · · ·	 148 21,975 5,618 848.6 99.8		14 62 71 4.9 1.9 1.7	21.1 732 181 28.3 3.22 1.83	294 43,590 11,140 1,680 198 112 117
Water ye	ar							

Lincoln Canal near Richfield, Idaho

Location.- Water-stage recorder, lat. 43°10', long. 114°19', in sec. 9, T. 3 S., R. 18
E., at head of canal, 100 yards east from Shoshone-Hailey highway, 5½ miles below
Magic Dam, and 12 miles northwest of Richfield.

Records available. - April 1925 to September 1937 (prior to 1937 irrigation seasons only).

Extremes. - Maximum discharge during year, 198 second-feet July 21; maximum gage height, 2.50 feet Aug. 11, 14; no flow for long periods.
1925-37: Maximum discharge, 708 second-feet May 28, 1927 (gage height, 4.00 feet); no flow for long periods each year.

Remarks. - Records good. Discharge Nov. 17-21 computed on basis of staff-gage readings and information furnished by watermaster for Big Wood River; that for June 25, July 4, 6, 30 interpolated. Canal diverts water from right bank of Big Wood River in sec 9, T. 3 S., R. 18 E., thence approximately parallels river for 10 miles to head of North Gooding Canal in sec. 15, T. 4 S., R. 18 E., where water is either diverted into North Gooding Canal or returned to river. Canal is used to avoid large channel losses in natural bed of river. No diversions above gage. Gage-height record and eight discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1936 to September1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5		0 0 0						0 0 0 0	161 153 150 148 146	167 162 162 162 162 162	174 174 170 161 154	132 138 138 145 134
6 7 8 9		0 0 0						105 118 127 132 136	145 145 140 140 138	160 159 161 159 161	153 154 162 157 159	126 110 106 100 92
11 12 15 14 15		0000						133 132 134 136 136	134 136 134 133 133	161 164 167 172 174	164 161 161 157 144	93 100 105 106 107
16 17 18 19 20		0 40 135 120 135						136 134 134 134 134	133 136 132 133 133	186 192 191 192 191	139 139 142 146 146	106 126 113 113 120
21 22 23 24 25		90 0 0	,					136 138 145 146 146	136 139 144 146 154	189 181 177 172 172	145 144 145 139 139	126 120 114 110 108
26 27 28 29 30 31		0 0 0						153 159 162 165 167 165	161 162 164 169 169	179 182 179 176 176 177	134 124 120 118 128 132	108 110 115 115 76

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
Ootober	0 520 0	0 135 0	0	0 17.3 0	1,030 0
Calendar year ,					
January. February March. April May Jun Jun Jun Jun Jun Jun Jun Jun Jun Jun	0 0 0 0 3,64 3 4,347 5,365	0 0 0 0 167 169 192	0 0 0 0 0 132 159	0 0 0 0 118 145 173	0 0 0 0 7,230 8,620 10,640
August	4,585 3,410	1 74 145	118 76	148 114	9,090 6,760
Water year 1936-37	21,870	192	0	59.9	43,370

Lincoln Canal near Shoshone, Idaho

Location.- Water-stage recorder, lat. 43°05', long. 114°19', in sec. 15, T. 4 S., R. 18
E., a quarter of a mile above mouth of canal, 7 miles west by north from Richfield,
11 miles north-northeast of Shoshone, and 12½ miles below Magic Dam.

Records available. - May 1925 to September 1937 (1929-36, irrigation seasons only).

Extremes. - Maximum discharge during year, 145 second-feet July 21 (gage height, 1.09 feet); no flow for long periods.

1925-37: Maximum discharge, 667 second-feet May 29, 1927 (gage height, 2.48 feet); no flow for long periods each year.

Remarks. - Records good. Discharge for Nov. 18-21 computed on basis of staff-gage readings and information furnished by watermaster for Big Wood River. Canal diverts water from right bank of Big Wood River in sec. 9, T. 3 S., R. 18 E., thence approximately parallels river for 10 miles to head of North Gooding Canal in sec. 15, T. 4 S., R. 18 E., where water is either diverted into North Gooding Canal or returned to river. Canal is used to avoid large channel losses in natural bed of river. Five ditches have rights to divert 12.5 second-feet for irrigation above this station. Gage-height record and five discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5		0 0 0 0						00000	125 123 121 118 118	134 129 129 131 131	136 136 136 131 123	98 98 102 106 112
6 7 8 9		0 0 0 0						26 79 93 97 102	116 118 114 114 116	131 131 129 127 129	123 123 127 129 127	104 93 86 82 79
11 12 13 14 14		0 0 0						102 100 102 104 104	112 116 114 114 112	131 131 131 134 131	129 127 125 125 110	77 82 86 89 89
16 17 18 19 20		0 0 80 70 85						108 104 106 104 108	112 114 112 106 104	136 140 140 140 140	106 102 104 106 108	91 100 91 6 9 91
21 22 25 24 25	:	9 5 0 0 0						106 106 112 114 114	104 110 112 116 118	143 138 138 136 131	108 108 108 110 108	100 98 95 91 89
26 27 28 29 30 31	!	0 0 0 0						116 123 125 127 127 129	123 127 127 131 134	136 143 140 140 140	106 95 91 89 95 98	89 86 91 93 82 -

Month	Second- foot-days	Maximum	Winimum	Mean	Run-off in acre-feet
October	0 330 0	0 95 0	0 0 0	0 11.0 0	0 655 0
Calendar year					
January. February Karch. April May June July August. September.	0 0 2,738 3,501 4,180	0 0 0 129 154 145 136	0 0 0 0 104 127 89 77	0 0 0 0 88.3 117 135 114 92.0	0 0 0 5,430 6,940 6,290 7,040 5,470
Water year 1936-37	17,057	143	0	46.7	33,820

Thorn Creek Spillway near Gooding, Idaho

Location.- Water-stage recorder, lat. 43°01', long. 114°37', in sec. 6, T. 5 S., R. 16 E., 600 feet below diversion from North Gooding Canal, 900 feet above Thorn Creek, and 7% miles northeast of Gooding.

Records available .- April 1928 to September 1937 (prior to 1937, irrigation seasons only).

Extremes. Maximum discharge during year, 236 second-feet Apr. 27 (gage height, 2.21 feet); usually no flow during nonirrigation season. 1928-37: Maximum discharge, 250 second-feet May 1, 1933 (gage height, 2.26 feet); usually no flow during nonirrigation seasons.

Remarks.- Records good. Spillway diverts from North Gooding Canal and discharges into Thorn Creek in sec. 6, T. 5 S., R. 16 E. It is utilized as part of plan to minimize losses from natural channel of Big Wood River. Gage-height record and results of 12 discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Nay	June	July	Aug.	Sept.
1 2 5 4 5		0 0 0					0 0 0 0	0 0 0 0 113	189 191 185 174 176	135 125 125 137 135	150 152 156 160 160	84 92 94 90 97
6 7 8 9 10		0 0 0					0000	160 187 213 225 198	181 178 176 178 178	135 135 135 133 127	160 150 150 156 148	106 105 100 100 90
11 12 13 14 15		0 0 115 100 75					0000	176 191 198 185 178	185 181 174 162 162	124 127 135 135 133	138 140 142 133 120	90 92 94 95 97
16 17 18 19 20		75 10 0 0					0000	174 168 71 0 64	156 158 164 166 168	157 142 144 142 140	122 122 122 116 116	94 88 86 86 84
21 22 23 24 25	•	0 0 0 0					0 0 39 111 84	187 162 158 152 154	166 160 146 129 129	138 135 129 131 138	116 118 116 116 115	86 90 88 84 88
26 27 28 29 50 31		00000					103 181 91 48 2	156 158 160 164 178 185	138 156 158 150 144	140 142 150 148 148 148	109 108 106 101 106 98	95 94 92 97 110

Month	Second- foot-days	Maximum	Kinimm	Mean	Rum-off in acre-feet
October	0 375 0	0 115 0	0 0 0	0 12.5 0	0 744 0
Calendar year					
January. February Haroh. April My My My My My My My My My My My My My	0 659 4,315 4,956 4,228	0 0 0 181 225 191 150 160	0 0 0 0 129 124 98 84	0 0 0 22.0 139 165 136 130 92.9	0 0 0 1,310 8,560 9,830 8,390 7,980 5,530
Water year 1936-37	21,343	225	0	5 8. 5	42,340

Little Wood River near Carey, Idaho

Location. Water-stage recorder, lat. $43^{\circ}23^{\circ}$, long. $116^{\circ}00^{\circ}$, in E₂ sec. 30, T. 1 N., R. 21 E., a third of a mile above West Canal and 6 miles northwest of Carey.

Drainage area. - 312 square miles.

Records available. - April 1904 to May 1905, September 1926 to September 1937. February 1920 to September 1928, at station 6 miles upstream (records equivalent except during spring run-off).

Average discharge. - 14 years (1920-24, 1925-27, 1929-37), 120 second-feet.

Extremes. - Maximum discharge during year, 680 second-feet Apr. 15; maximum gage height, 4.07 feet Feb. 17, during period of ice-effect; minimum discharge, 11 second-feet Aug. 10 (gage height, 0.75 foot).

1904-5, 1928-37: Maximum discharge, 1,180 second-feet Apr. 27, 1927 (gage height, 4.73 feet); maximum gage height, 5.1 feet May 22, 1904; minimum discharge, 5.6 second-feet, Aug. 21 and 28, 1934.

Remarks.- Records good except those for Oct. 25-31, Nov. 4-21, June 6 (interpolated) and those for Apr. 26-29 (computed on basis of records for stations on nearby streams), which are fair, and those for periods of ice effect or missing gage-heights Nov. 27 to Dec. 20, Dec. 27 to Mar. 19 (computed on basis of available gage heights, one estimate of discharge by field engineer, weather records, and above-named records, which are poor. A few small irrigation diversions above station. No regulation. Gage-height record furnished by watermaster for upper Little Wood River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	29 29 29 29 29	39 37 38 38 38				40	109 116 104 89 92	196 224 260 294 332	165 149 149 155 136	77 72 67 65 63	34 33 30 29 22	12 12 12 12 15
6 7 8 9 10	29 39 32 30 29	38 39 39 39 39	35	30	35		95 88 94 109 112	347 320 299 299 308	129 120 133 146 127	72 63 61 72 65	22 20 17 17 16	15 14 13 12 12
11 12 13 14 15	29 29 31 33 33	39 39 40 40 40				55	129 15e 227 323 437	285 265 265 285 302	118 110 107 107 107	60 58 57 60 60	17 17 16 15 14	12 12 12 12 12
16 17 18 19 20	34 34 34 36 36	40 40 40 41 41				63	437 326 311 288 305	291 282 285 282 262	112 109 100 97 104	54 51 47 45 42	15 14 13 13 12	11 11 11 11 12
21 22 25 24 25	35 35 34 33 34	41 41 41 43 43	37 37 39 36 36	35	40	57 63 63 54 57	335 254 206 182 179	227 230 251 251 251	118 158 142 110 95	40 38 33 33 30	12 12 12 12 12	21 19 16 16 18
26 27 28 29 30 31	34 35 36 37 38 38	42 40 40 35 35	36 35 35 30 30 30		J =	65 69 74 52 95 105	210 250 250 220 191	254 238 238 227 196 175	88 88 86 84 83	28 26 26 25 25 25	12 12 12 13 13	16 17 17 18 18

				L	_	100			175		DT.	<u> </u>	<u>.2</u>	
		1	(onth			Second foot-da		Yaz	clanon	Minimum	Kea	n	Run-o	ff in
HOT	ember					1,01 1,18 1,08	5		38 43	29 35	39	2.6 2.5 1.9	2,0 2,3 2,1	50
0	alendar	ysar 193	56			39,51	6		776	-	108	3	78,3	80
Mar Apr May June July Aug	ruary					1,04 1,74 6,22 8,22 3,53 1,54	5 0 6 4 4 6 9		- 105 437 347 165 77 34 21	- - - - - - - - - - - - - - - - - - -	37 56 208 261 118 49	5	2,00 2,00 3,4 12,3 16,3 7,0 3,0 1,0	70 50 50 10 10 70
W	ater yes	r 1936-3	57			27,54	3		437	-	7/	5.5	54,6	20

Little Wood River near Richfield, Idaho

Location. - Water-stage recorder, lat. 43°03', long. 114°08', in sec. 30, T. 4 S., R. 20
E., half a mile above Jim Burn's Slough and heading of Dietrich Canal and 1 mile east of railroad station at Richfield.

Records available .- January 1911 to September 1937 (irrigation seasons only).

Extremes.- Maximum discharge during period of record, 200 second-feet Apr. 17, 18 (gage height, 2.04 feet); minimum, 50 second-feet May 26 (gage height, 1.17 feet).
1911-37: Maximum discharge observed, 722 second-feet May 17, 18, 1911 (gage height, 4.5 feet); minimum, 7.6 second-feet June 24, 25, 1920 (gage height, 0.52 foot).

Remarks.- Records good. Discharge for Oct. 5-7, 30, Mar. 28-30, Apr. 7, 29 interpolated.

No records Dec. 1 to Mar. 28. Small ranch diversions above gage. Gage-height record and eight discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 5 4 5	96 93 91 94 94	111 115 117 117 117					184 190 192 182 172	156 140 138 142 145	71 72 71 71 68	76 76 75 72 75	58 58 67 64 67	70 70 71 72 75
6 7 8 9 10	95 96 96 96 102	117 121 121 121 119				-	161 155 149 147 149	149 145 142 140 134	71 74 72 74 84	76 80 86 88 86	71 74 71 70 68	75 74 74 71 71
11 12 13 14 15	105 107 107 104 104	119 119 115 113 113					147 142 145 145 142	123 102 83 68 74	81 80 78 78 72	84 84 80 84 86	70 70 71 68 67	72 74 74 75 81
16 17 18 19 20	98 94 94 96 94	113 113 113 113 113				-	172 194 194 184 177	76 75 80 76 75	74 75 78 81 78	78 81 78 75 75	68 70 68 68 65	84 86 83 76 80
21 22 23 24 25	94 96 105 109 109	115 115 115 115 115				-	170 170 163 147 132	68 62 60 62 64	76 75 75 75 75	75 70 67 70 71	64 61 56 56 60	80 81 86 84 84
26 27 28 29 30 31	111 111 111 111 111 111	115 113 113 113 113				138 146 154 162 170	119 121 134 151 168	56 64 70 70 70 70 68	74 74 76 78 78	70 67 68 68 61 59	60 58 59 61 67 71	81 83 83 83 75

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,135 3,462	111 121 -	91 111 -	101 115 -	6,220 6,870
Calendar year					
JanuaryFebruary	- - 770	- 176	138	154	1.530
April	4,798 2,977	194 156	119 56	160 96.0	9,520 5,900
JuneJuly	2,256 2,341 2,026	84 88 74	68 59 56	75.2 75.5 65.4	4,470 4,640 4,020
September Water year	2,328	86	70	77.6	4,620

Little Wood River at Shoshone, Idaho

Location. - Water-stage recorder, lat. 42°56', long. 114°24', in sec. 2, T. 6 S., R. 17
E., Just above diversion dam for town water supply and 400 feet above Shoshone-Richfield highway bridge in Shoshone.

Records available. - April 1922 to September 1937 (irrigation seasons only).

Extremes.- Maximum discharge recorded during year, 436 second-feet May 31, June 1 (gage height, 2,75 feet); minimum discharge recorded, 46 second-feet Oct. 15 (gage height, 0.75 foot).

1922-37: Maximum discharge, 664 second-feet June 18, 1922 (gage height, 2.26

1922-37: Maximum discharge, 664 second-feet June 18, 1922 (gage height, 2.26 feet); minimum, practically no flow July 29, 1931.

Remarks. - Records good except those for Oct. 28-31, which were estimated and are poor.

No records Nov. 1-23, Nov. 25 to Mar. 26. Discharge interpolated Oct. 4-6. Numerous irrigation diversions above and below station. Flow is affected also by operation of Milner-Gooding canal, which diverts from Snake River and crosses stream above station. Gage-height record and 16 discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56					-	134	133	433	389	408	324
2	58			l	1	-	143	124	426	388	410	314
5 4	54 55			l	1	-	137	112 118	416 415	396 403	412 415	311 294
3	56				1	-	115 104	257	422	400	413	294
۱۳۱	50			1	[_	104	201	332	1 400	410	207
6	57			l	ĺ	_	78	304	423	401	410	291
7	58			l		-	73	360	417	402	367	278
8	61		l	l		-	81	380	413	405	380	268
9	61			!		- 1	76	405	41.4	402	380	261
10	64				l	- !	73	374	418	404	363	250
11	66			i .	1	_	73	362	419	400	357	254
12	68			l .	l	-	73	394	408	403	357	254
13	71		ŀ	l .		-	78	386	403	394	359	257
14	76	1	1	1	1		76	364	392	394	357	261
15	68	l .	ł	ł	i	-	73	354	388	397	356	257
		l	İ	l	l	l			i e			
16	74		l	l	1	-	71	352	381	402	354	250
17	71	l '	1	l		-	82	353	386	400	356	247
18	76	l .	l	ł	ŀ	-	94	358	385	402	353	247
19	76 76		l	į		-	111 97	368	392	398	353	247
اتما	76		i	j		-	97	373	395	395	356	250
21	74		i			۱ -	146	361	397	392	359	261
22	74	ŀ		l	i	_	230	359	391	389	360	257
25	78		ĺ	ļ		-	289	356	375	388	362	247
24	87	60	l	l		-	260	357	373	393	360	250
25	90				l	-	263	356	377	402	354	254
26	93		1	1			054	203				0.03
27	93		l	1	l	1.57	254 241	381 404	400	403 403	353 351	261 257
28	90		ł	1	l	124	219	404	412 410	403	346	261
29	90		l	l	l	127	216	408	404	404	346	268
30	90		1	1		121	180	420	397	406	357	181
31	90			l		121	-	432	2007	407	341	

Nonth		Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October		2,251	93	54	72.6	4,460
November		-	_	-	-	· -
December		-	-	-	-	-
Calendar year						
January			-	_	-	-
February		-	- 1	-	_	l -
March 27-31		630	137	121	126	1.250
April		4.140	289	71	138	8.210
Kay		10.451	432	112	337	20.730
June		12.082	433	373	403	23.960
July		12.368	407	388	399	24.550
			415	341		22.660
August	• • • • • • • •	11,425			369	
September	• • • • • • •	7,599	324	lsl	263	15,670
Water year						

Fish Creek above dam near Carey, Idaho

Location.- Water-stage recorder in sec. 2, T. 1 N., R. 22 E., 1½ miles above mouth of West Fork of Fish Creek, 1½ miles above dam of Carey Valley Reservoir Co., and 14 miles northeast of Carey.

Drainage area .- About 56 square miles.

Records available.- May 1920 to September 1937 (irrigation seasons only except for 1921, 1922, 1928, 1927).

Extremes. - Maximum discharge recorded during year, 26 second-feet May 8 (gage height, 0.57 Toot); minimum discharge recorded, 0.3 second-foot Aug. 7 (gage height, 0.03 foot).

foot).

1920-37: Maximum discharge, 158 second-feet May 6, 1922 (gage height, 1.78 feet former site and datum); no flow Sept. 9-12, Oct. 17-27, 1928.

Remarks.- Records good. Discharge for Oct. 3, May 3-7, June 20, 21 interpolated. No records Oct. 1 to Nov. 18, Nov. 20 to Apr. 30. No regulation. Several small diversions above gage. Gage-height record furnished by watermaster for Fish Creek. Control is Cippoletti weir rated by current-meter measurements.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used September 24-30)

0	0	0.25	7.0
•05	•5	.3	9.3
.1	1.6	.4	14.7
.15	3.2	•5	21.0
.2	5.0	•6	25.3

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	4.3 4.0 3.6 3.6							25 24 24 24 24 24	14 12 11 11 11	3.6 3.2 3.6 3.6 2.6	2.2 2.2 1.9 1.6	1.2 .9 .9 1.2 1.9
6 7 8 9 10	3.6 3.6 3.9 3.9 3.9							25 25 25 25 25 22	11 11 11 12 12	0.00 0.00 0.00 0.00	.4 .5 .7 .9	2.2 1.9 1.6 1.6
11 12 13 14 15	= = = = = = = = = = = = = = = = = = = =							20 19 19 1e 1e	9.8 9.8 9.8 9.8	2.9 2.6 1.9 1.6 1.4	.9 1.2 1.2 1.2	1.4 1.6 1.6 1.6
16 17 18 19 20	-	8.4						18 18 18 15 15	9.8 9.3 5.8 5.4 7.9	1.4 1.2 .9 1.9 2.2	1.2 1.2 1.2 1.2 1.2	1.6 1.6 1.6 2.2
21 22 23 24 25	= = = = = = = = = = = = = = = = = = = =							16 16 13 15 17	7.5 7.0 6.6 6.6 6.2	1.9 1.9 1.9 1.2 1.4	.9 .9 .9	3.2 2.9 2.6 2.2
26 27 28 29 30 31	-							17 15 14 14 13	5.8 5.4 5.0 4.3 3.9	1.6 1.4 1.2 1.2 1.2	.5 .5 .9 1.2	1.9 1.9 1.9 1.9

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1-10	38.7 -	4.3	3.6	3.87 -	777 - -
Calendar year					
January. February. March. April. May. Jun. July. July. Septomber. Water year	591 268.7 65.3	25 14 3.6 2.2 3.2	13 3.9 .9 .4 .9	19.1 8.96 2.11 1.05 1.82	1,170 533 130 65 108

Fish Creek near Carey, Idaho

Location.- Water-stage recorder in sec. 15, T. 1 N., R. 22 E., 600 feet below Carey Valley Reservoir Co.'s dam and 11 miles northeast of Carey.

Records available. - April 1919 to September 1920, May 1923 to September 1937. 1921 and 1922, discharge measurements only.

Extremes.- Maximum discharge during year, 77 second-feet June 23-25 (gage height, 1.16 feet); minimum, 0.3 second-foot Nov. 12 to latter part of winter. 1919-20, 1923-37: Maximum discharge, 170 second-feet May 19, 1927 (gage height, 1.91 feet, former site and datum); reservoir gates usually closed during nonirrigation season and flow past station is leakage only.

marks. - Records good except those for Dec. 1 to Apr. 27, which are poor. Discharge for periods of missing gage heights Oct. 3 to Nov. 18, Nov. 20 to Apr. 27, Apr. 29 to May 1, July 5, Sept. 19, computed on basis of information furnished by watermaster. Flow regulated by storage in Fish Creek Reservoir. No diversions between station and dam. Gage-height record furnished by watermaster for Fish Creek.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.0	0	0.5	20.8
.1	1.85	•6	27.e
.2	5.15	•8	43.5
.3	9.45	1.0	61.3
.4	14.6	1.2	81.2

Discharge, in second-feet, water year October 1936 to September 1937

Day	Got.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jung	July	Aug.	Sept.
1 2 3 4 5	6.8 6.8 6.8 6.8	6.8 6.8 6.8						3.4 1.8 1.8 1.8	59 52 47 48 49	48 43 29 13 7.6	28 28 27 21 10	2.2 2.5 2.6 2.8 3.1
6 7 8 9 10	6.8 6.0 6.0 6.0	6.8 6.0 6.8 6.8						1.8 1.8 1.6 .7	49 40 44 38 26	11 14 14 16 28	9.0 12 12 12 12	3.8 3.8 3.8 3.8
11 12 13 14 15	6.8 6.8 6.8 6.8	3.6 .3 .3 .3					1.0	11 17 17 18 18	21 19 16 16 16	35 30 26 21 1e	11 11 11 10 10	3.8 3.8 3.8 3.8
16 17 18 19 20	6.8 6.8 6.8	.3 .3 .3						18 18 18 15 19	16 18 24 29 39	31 32 32 33 39	9.9 9.4 9.4 9.0 8.1	3.8 3.8 3.9 4.4
21 22 25 24 25	6.8 6.8 6.8 6.8	.3 .3 .3 .3						18 18 18 18 26	39 47 66 77 74	53 69 58 56 54	7.6 7.2 6.0 6.4 5.2	4.4 4.4 4.4 4.4
26 27 28 29 30 31	6.0 6.8 6.0 6.0 6.8 6.8	.3 .3 .3 .3 .3					2.6 5.2 5.2	39 39 54 59 59	71 71 70 66 56	53 45 27 24 29 29	1.2 1.4 1.4 1.6 1.6	4.4 4.4 4.4 4.4

Month		Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October November December		210.6 77.3 9.3	6.8 6.8 -	6.8 .3	6.0 2.58 .3	418 153 18
Calendar year 1936	• • • • • • • • • • • • • • • • • • • •	6,310.2	96	•	17.3	12,530
January. February March. April My June July August September.		9.3 8.4 15.5 40.0 595.1 1,311 1,007.6 312.0 115.1	- - 5.2 59 77 59 28 4.4	- - - - 16 7.6 1.2 2.2	.3 .5 1.33 199.2 43.7 32.5 10.1 3.84	10 17 31 79 1,180 2,800 2,000 619 228
Water year 1936-37	• • • • • • • • • • • • • • • • • • • •	3,711.4	777	-	10.2	7,360

Silver Creek near Picabo, Idaho

sation. Water-stage recorder, lat. $43^{\circ}17^{\circ}$, long. $114^{\circ}01^{\circ}$, in sec. 1, T. 2 S., R. 20 E., $1\frac{1}{2}$ miles below mouth of drain ditch of Blaine County Drainage District No. 1 and 3 miles southeast of Picabo. Location.

Records available. - May 1920 to September 1937 (1922-1935, irrigation seasons only).

Extremes. Maximum discharge during year, 251 second-feet Apr. 2; maximum gage height, 3.13 feet Jan. 6, during period of ice effect; minimum discharge, 88 second-feet Aug. 31; minimum gage height, 1.13 feet Dec. 4, 1920-37: Maximum discharge, 312 second-feet Apr. 3, 1923; maximum gage height, 3.41 feet Apr. 15, 1936; minimum discharge, 28 second-feet June 2, 1920 (gage height, 0.48 foot).

Remarks.- Records good except those for periods of ice effect or missing gage heights, Dec. 3-6, 10-14, Dec. 30 to Mar. 18, which were computed on basis of one discharge measurement, weather records, and records for stations on nearby streams and are fair. Discharge interpolated Nov. 21. Numerous diversions for irrigation above station. Some water is bypassed around station by slough on right bank heading 300 feet above gage. Gage-height record and five discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 5 4 5	119 11e 117 117 116	135 136 136 136 137	119 117 117 117 117]	228 245 224 205 188	134 131 129 127 126	102 99 99 97 99	110 108 106 105 107	102 104 102 105 108	90 93 96 95 100
6 7 8 9 10	119 122 123 126 126	138 139 140 137 136	118 120 119 118 117			115	184 180 176 178 179	117 109 114 115 113	102 100 98 110 110	111 115 114 112 110	112 108 107 105 105	100 99 96 96 96
11 12 13 14 15	127 12e 126 125 118	134 133 133 133 133	117 117 116 116 116) 135	176 172 171 175 175	105 99 102 99 95	107 106 106 105 103	108 105 106 109 107	105 106 105 104 102	98 98 99 102 103
16 17 18 19 20	118 122 122 122 124	133 133 133 133 133	117 116 115 115 115			154 155	166 157 147 143 138	92 95 97 94 94	106 109 110 112 110	110 107 106 105 101	101 102 100 97 94	104 103 103 100 100
21 22 23 24 25	126 128 128 126 126	132 132 131 130 129	115 116 116 116 116			147 148 158 146 148	136 131 129 126 121	89 91 92 94 88	107 107 105 101 103	100 101 101 103 104	93 93 91 90 90	109 110 110 107 107
26 27 28 29 30 31	127 127 128 133 134 135	127 130 127 123 121	116 120 117 116 116 116			159 167 172 179 188 209	122 123 131 140 141	94 101 99 98 96 99	102 104 105 106 108	104 106 105 103 99 96	91 90 91 93 95 92	108 108 112 111 111

Month	Second- foot-days	Maximum	Ninimum	Mean	Run-off in acre-feet
October	3,863 3,983 3,619	135 140 120	116 121 115	124 133 117	7,640 7,900 7,180
Calendar year 1936	44,992	278	87	123	89,230
January February March April May June July July August September	3,220 4,360 4,907 3,228 3,138 3,284	209 245 134 112 115 112	- - 121 88 97 96 90	110 115 141 164 104 105 106 99.5	6,760 6,390 8,650 9,730 6,400 6,220 6,510 6,120 6,090
Water year 1936-37	43,150	245	-	118	85,590

Note.- The flow in bypass channel, which carries water around gage measured 1.38 second-feet Mar. 19; no flow Nov. 19, Feb. 1, May 3, 25.

King Hill Canal near Hagerman, Idaho

Location. - Staff gage, lat. 42°52', long. 114°55', in SW\frac{1}{2} sec. 27, T. 6 S., R. 13 E., half a mile west of highway bridge over Big Wood River, 1,000 feet below heading at Idaho Power Co.'s canal, 430 feet above mouth of inverted syphon crossing Snake River, and 3\frac{1}{2} miles north of Hagerman.

Records available .- March 1930 to September 1937 (irrigation seasons only).

Extremes. Maximum discharge during year, 308 second-feet May 24-26; maximum gage height, 3.82 feet May 24-28, Sept. 1; practically no flow during nonirrigation season. 1930-37: Maximum discharge, that of May 24-26, 1937; maximum gage height, 3.64 feet July 3, 4, 1931, Aug. 13 to Sept. 4, 1935, Aug. 11-14, Aug. 16 to Sept. 1, 1936; practically no flow during nonirrigation season.

Remarks.- Records good. Water is diverted from Big Wood River through Idaho Power Co.'s canal by King Hill Irrigation District for use on its project. Gage-height record furnished by King Hill Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	How.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	259 259 259 259 259 173	135 135 135 135 135					69 114 114 114 114	233 250 259 259 269	295 295 296 296 296	279 284 167 0 68	273 275 276 278 279	286 283 283 286 284
6 7 8 9 10	0 0 100 200 200	135 135 56					114 114 114 133 144	275 285 290 290 290	296 296 298 257 52	272 283 284 284 283	279 283 283 254 286	283 279 279 279 210
11 12 13 14 15	200 150 0 0		*1				144 144 144 144	294 301 305 301 268	227 268 271 275 275	264 286 288 286 286 288	284 286 283 276 276	97 281 279 275 270
16 17 18 19 20	0 0 0 108 124	-				*3	144 144 144 154 159	306 306 305 305 305	275 275 143 105 284	290 288 288 284 283	279 278 278 281 283	263 257 254 252 249
21 22 23 24 25	0000						159 182 195 211 221	305 305 305 308 308	284 284 284 281 275	283 283 281 278 278	283 283 283 283 279	247 247 247 247 247 246
26 27 28 29 50 51	0 39 135 135 135						221 221 228 233 233	308 306 306 303 301 298	267 263 265 270 275	276 273 270 270 270 273	279 279 283 283 281 283	243 238 239 247 251

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,735 1,001	259 135 ~	0 56 -	88.2 125	5,420 1,990
Calendar year					
January February Rarch April May Jun Jun July August September.	4,713 9,049 7,825 8,104	- - 233 308 298 290 286 286	- - 69 233 52 0 273	157 292 261 261 281 256	9,350 17,950 16,520 16,070 17,250 16,240
Water year					

^{*}Discharge measurement.

Mountain Home feeder canal near Mountain Home, Idaho

Location. - Water-stage recorder above concrete control, lat. 43°13', long. 115°42', in sec. 36, T. 2 S., R. 6 E., 30 feet below point of diversions from Canyon Creek and 5 miles north of Mountain Home.

Records available. - April 1924 to September 1929, April 1931 to September 1937.

Extremes.- Maximum discharge during year, 89 second-feet July 5 (gage height, 1.37 feet);

minimum daily discharge, 1 second-foot Sept. 23-26.
1924-29, 1931-37: Maximum discharge, 228 second-feet Feb. 21, 1927 (gage height, 2.18 feet, former datum); no flow for long periods in each year.

Remarks.- Records good except those for Oct. 1 to Nov. 22, Nov. 24 to Mar. 6, which were computed on basis of information furnished by watermaster and are poor. Discharge for Apr. 2, 3, July 15, 16, 18, Sept. 11 interpolated. Canal diverts from Canyon Creek in sec. 36, T. 2 S., R. 6 E. Water for irrigation of about 5,000 acres included in project of the Mountain Home Irrigation District is delivered to the Mountain Home cooperative canal, which heads in the Mountain Home feeder canal half a mile below gage. When there is a surplus of water for irrigation, canal feeds directly into the Mountain Home Reservoir. No diversions from canal above gage; three small diversions between gage and head gates of Mountain Home cooperative canal half a mile below. Flow regulated by head gate in Canyon Creek and by storage in Long Tom Reservoir. Gage-height record furnished by Mountain Home Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5						4 4 4 5	39 43 48 52 52	37 36 45 57 58	67 67 61 59 59	60 79 80 88 89	40 41 45 27 32	41 43 43 40 34
6 7 8 9	1	3				10 15 19 20 24	52 48 49 50 52	70 71 74 72 70	59 59 58 61 57	87 86 85 83 69	39 41 41 52 57	34 32 38 42 49
11 12 13 14 15				,		29 36 46 51 53	49 49 59 70 72	68 67 62 59 70	55 56 56 56 52	65 71 73 73 72	52 48 53 55 59	46 44 42 35 32
16 17 18 19 20) .	4				58 56 54 45 39	68 60 56 52 50	69 71 71 70 70	49 39 38 39 39	72 71 70 68 57	60 60 68 69 60	29 24 19 4 3
21 22 25 24 25	} 2					35 34 32 30 28	48 45 42 40 38	68 68 68 65	38 37 37 37 44	53 48 39 39 45	58 62 63 64 62	3 2 1 1 1
26 27 28 29 30		} 4				29 31 31 31 34	38 38 41 38 38	68 67 65 65 67	61 66 65 76 81	48 48 44 39 38 40	57 46 38 37 36 35	1 2 2 2 2
51	ر ا	-				36		67	-	40	35	~

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	47 105		=	1.5 3.5	93 208
December	124	-		4.0	246
Calendar year 1936	11,820	104	0	32.3	23,450
January	93	•	-	3.0	184
February	112 927	58	-4	4.0 29.9	222 1,840
April		72	38	49.2	2.930
May	2,002	74	36	64.6	3,970
June	1.628	81	37	54.3	3,230
July	1,998	89	38	64.5	3,960
August	1,557	69	27	50.2	3,090
September	691	49	1	23.0	1,370
Water year 1936-37	10,760	89	-	29.5	21,340

Mountain Home cooperative canal near Mountain Home, Idaho

Location.- Water-stage recorder and concrete control, lat. 43°12', long. 115°42', in sec. 36, T. 2 S., R. 6 E., at the Lamberton Weir, 300 feet (revised) below point of diversion from Mountain Home feeder canal and 4½ miles north of Mountain Home. Datum was lowered 0.27 foot Mar. 8, 1937.

Records available. - April 1924 to September 1929, April 1931 to September 1937.

Extremes.- Maximum discharge during year, 80 second-feet July 1 (gage height, 1.39 feet); no flow Oct. 1 to Nov. 22, Nov. 25 to Mar. 23, Mar 26 to Apr. 16, Sept. 17-30. 1924-29, 1931-37: Maximum discharge, 109 second-feet July 16, 1925 (gage height, 1.69 feet, former datum); no flow, except occasional stock-water runs, during nonirrigation seasons.

Remarks.- Records good except those for Nov. 23, 24, Mar. 24, 25, which were based on one discharge measurement and information furnished by watermaster and are poor. No diversions between gage and head of canal. Flow regulated by operation of gates at head of canal and in Long Tom Reservoir. Canal diverts from Mountain Home feeder canal. Water is used for irrigation on about 5,000 acres of Mountain Home Irrigation District. Gage-height record furnished by Mountain Home Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Дау	Oct.	Nov.	Dea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5		0 0 0 0				0 0 0 0	0 0 0	30 29 35 42 45	55 52 46 45 47	78 78 76 76 68	33 33 38 22 27	37 39 3e 36 32
6 7 8 9 10		0 0 0 0		,		0 0 0 0	0 0 0	56 60 64 65 66	50 51 51 51 42	65 70 68 67 66	33 34 34 46 51	31 33 33 38 44
11 12 15 14 15		0 0 0				0 0 0	0 0 0 0	64 62 61 55 62	42 42 58 31 24	62 63 72 72 72	46 45 49 49 53	44 44 42 35 31
16 17 18 19 20		0 0 0 0				0 0 0 0	0 3.1 6.0 5.7 5.7	62 65 67 69 69	25 24 23 17 16	70 70 67 68 56	55 55 63 66 60	8.8 0 0 0
21 22 23 24 25		0 0 3.5 2.0				0 0 0 3.0 2.0	5.4 5.2 5.2 5.2	69 55 56 58 57	15 24 30 31 37	50 45 42 37 42	55 59 58 59 58	0 0 0 0
26 27 28 29 30 31		0 0 0 0				0 0 0 0	6.4 14 21 26 29	57 57 56 55 56 56	51 57 59 71 78	44 44 40 35 33 33	57 46 34 34 34 32	0000

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0 5•5 0	0 3. 5 0	0 2.0 0	0 0.1s 0	0 11 0
Calendar year 1936	7,415.1	81	0	20.3	14,700
January. February March. April. May June June July August September.	0 5.0 143.8 1,760 1,225 1,829 1,418 563.8	0 0 3.0 29 69 78 78 66 44	0 2.0 0 29 15 33 22 0	0 0 .16 4.79 56.8 40.8 59.0 45.7 18.8	0 9.9 265 3,490 2,430 3,630 2,810 1,120
Water year 1936-37	6,950.1	78	0	19.0	13,790

Owyhee River near Gold Creek, Nev.

Location.- Water-stage recorder, lat. 41°41'10", long. 115°51'20", in NW1 sec. 25, T. 44
N., R. 54 E., 500 feet below Wild Horse Dam and 8 miles west of Gold Creek. Altitude, about 6,130 feet.

Drainage area.- 209 square miles.

Records available.- October 1936 to September 1937, March 1916 to September 1925, at

site 1200 feet upstream.

Site 1200 feet upstream.

Extremes. Maximum discharge during year, 267 second-feet when recorder clock was stopped,

Apr. 2 to May 11 (gage height, 3.80 feet); minimum, less than half a second-foot at

times when reservoir gates were temporarily closed.

1916-25, 1938-37: Maximum discharge, 1,810 second-feet May 5, 1922 (gage height,

10.11 feet, former site and datum), from rating curve extended above 400 second-feet;

10.11 feet, former site and datum), from rating curve extended above 400 second-feet; minimum, that of 1936-37.

Remarks. - Records good except those for period of ice effect, Dec. 2 to Mar. 17 (computed on basis of one gage reading and weather records), those for period when clock was stopped, Apr. 3 to May 11 (computed on basis of records for station at Mountain City and recorded range of stage graph), and those for periods when recorder was not in operation because of construction work, Oct. 1 to Nov. 16, Aug. 18 to Sept. 30 (computed on basis of records for station at Mountain City), all of which are fair. Wild Horse Dam constructed by the U. S. Indian Irrigation Service was completed in 1937. The reservoir (capacity 32,000 acre-feet) was not used during the current year. Some small diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discherge, in second-feet)

1.0	2	2.3	51
1.2	4	2.6	78
1.4	8	3.0	127
1.6	13	3.4	189
1.8	20	3.e	267
0 0	27		

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5			5				22 25 25 20 18	170 180 200 220 240	46 36 29 22 18	4 4 4 4 4	1 1 1 1	
6 7 9 10		6				} s	16 15 20 30 45	220 200 180 160 140	22 17 21 60 5 0	4 3 3 4 4	1 1 1 1) 1
11 12 13 14 15					5		60 80 130 200 250	120 111 105 101 100	32 39 28 24 34	3 2 3 3 3	1 1 1 1	
16 17 18 19 20		6 6 5 5				12 12 12 12	240 230 210 190 210	99 86 77 87 84	24 16 14 12 11	3 3 2 2	1 1 1 1	
21 22 23 24 25		5 6 5 5				11 12 11 11	230 220 200 180 200	64 52 49 45 53	10 8 7 7 6	2 2 2 2	1 1 1 1	2
26 27 28 29 50 51		5 5 5 5				12 12 13 13 15	220 240 220 200 180	64 50 41 34 44 57	6 5 5 5	2 2 2 2 2 2 2 2	1 1 1 1 1	
	Month				Second		ximum	Minimum	Mean	Ru	m-off in	

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	155 171 155	111	111	5 5.7 5	307 339 307
Calendar year					
January. February Barch. April May June July August September.	3,433 619	17 250 240 60 4 1	15 34 5 2 1	4 6 10 138 111 20.6 2.8 1.0	246 333 615 8,190 6,810 1,230 173 61 89
Water year 1936-37	9,427	250	-	25.8	18,700

Owyhee River at Mountain City. Nev.

Location.- Water-stage recorder, lat. 41°50', long. 115°59', in SE½ sec. 36, T. 46 N., R. 53 E. at Mountain City, about one mile below California Creek.

Drainage area. - 350 square miles.

Records available. - May to December 1913, November 1926 to September 1937.

Extremes. - Maximum discharge during year, 617 second-feet Apr. 15 (gage height, 4.18 feet); minimum daily, 1 second-foot Aug. 24 and Sept. 3-20.
1913, 1927-37: Maximum discharge, 1,830 second-feet Apr. 20, 1936 (gage height, 7.6 feet), from rating curve extended above 600 second-feet; no flow July 29 to Sept. 15, 1931, and July 21 to Sept. 18, 1934.

Remarks.- Records good except those for period of ice effect, Nov. 1 to Mar. 22, and those for periods of missing gage heights, Sept. 13, 14, 16-25, which were computed on basis of weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September1937

Day	Got.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	9 9 9 9						133 190 133 110 105	399 424 460 500 538	161 139 124 108 103	24 21 16 15 14	5 5 5 6	2 2 1 1
6 7 9 10	9 9 9 10					20	100 95 103 119 133	509 503 474 454 435	96 98 96 132 139	14 16 24 20 18	6 6 5 5 5	1 1 1 1
11 12 13 14 15	8 9 10 11 12						156 173 278 491 556	381 339 332 336 336	121 117 108 96 93	15 13 12 12 12	5 5 5 4 4	1 1 1 1
16 17 18 19 20	12 12 10 12 16	14				70 60 50 55	526 452 432 418 438	326 300 278 281 269	88 80 74 71 65	12 11 9 8 7	3 3 3 2	1 1 1
21 22 25 24 25	16 14 13 13					55 55 54 52 51	49 4 486 440 407 426	230 204 190 188 192	58 52 45 42 38	6 6 7 7	2 2 2 1 2	8 8 8 8 8
26 27 28 29 30 31	13 14 14 15 15 16	-				52 58 61 61 72 91	474 506 457 429 410	208 190 167 152 161 176	35 34 31 25 26	6 6 6 5 5	0 5 0 0 5 5	2 3 3 3 5

Month	Second- foot-days	Maximum	Minimm	Mean	Run-off in acre-feet
October	360 390 372	16 - -	8	11.6 13 12	714 774 738
Calendar year 1936	53,134	1,760	-	145	105,300
January February March April Kay Jun Jun Jul Jul August September	336 1,217 9,670 9,932 2,495 359	91 556 538 161 24 6 3	95 152 25 5 1	10 12 39.3 322 320 83.2 11.6 3.7 1.5	19,180 19,700 4,950 712 226
Water year 1936-37	25,601	556	1	70.1	50,780

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Owyhee River above Owyhee Reservoir, Oreg.

Location. - Water-stage recorder, lat. 43°15', long. 117°30', in SE1 sec. 18, T. 27 S., R. 43 E., 3 miles above flow line of Owyhee Reservoir and 8 miles southwest of Watson. Zero of gage is about 2,690 feet above mean sea level as determined by Bureau of Reclamation.

Reclamation.

Records available. October 1931 to September 1937 in reports of Geological Survey; April 1929 to September 1936 in reports of State engineer.

Extremes. Maximum discharge during year, 12,900 second-feet Apr. 15 (gage height, 11.71 feet); minimum, 115 second-feet Jan. 8.

1929-37: Maximum discharge, 16,000 second-feet Mar. 20, 1932, Apr. 19, 1936; maximum gage height, 12.95 feet Mar. 20, 1932; minimum discharge, 103 second-feet Aug. 19, 1934 (gage height, 3.57 feet).

Remarks. Records good except those for periods of ice effect, Jan. 2-4, 7, 9-20, Jan. 22 to Feb. 2, which were computed on basis of gage heights, weather records, and inflow to and outflow from Owyhee Reservoir and are fair. Diversions for irrigation above station. Discharge slightly regulated by storage in 11 small reservoirs having total capacity of 52,000 acre-feet. Water-stage recorder inspected and some discharge measurements furnished by Bureau of Reclamation.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0ct. 1	to Feb.	2		Feb. 3	to Sept.	30
3.5	90		3.5	93	6.5	1,720
3.7	130		3.7	133	7.0	2,200
4.0	205		4.0	209	7.5	2.770
4.3	299		4.5	378	e.0	3,450
			5.0	610	9.0	5.180
			5.5	930	10.0	7.550
			6.0	1,310	11.0	10,600

Дау	Got.	How.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	166	194	192	220	220	254	2,830	1,810	594	230	138	129
2	166	192	194	220	230	261	4,490	1,680	572	218	140	129
3	166	192	197	220	248	270	6,040	1,590	577	209	140	131
4	168	197	197	215	254	284	4,250	1,630	594	206	140	129
5	170	200	202	205	239	297	3,450	1,630	572	198	140	129
6 7 8 9	168 168 168 170 173	197 197 200 197 200	200 200 205 202 206	194 180 166 160 165	239 233 239 239 224	311 333 367 417 505	2,650 2,360 2,150 1,900 2,200	1,720 1,950 1,950 1,860 1,720	530 487 446 417 401	187 100 177 170 170	138 133 133 133 133	133 133 133 133 133
11	173	200	205	170	224	582	3,030	1,590	390	170	133	133
12	173	200	202	175	230	805	3,030	1,470	386	164	133	133
13	173	211	197	185	230	1,190	2,840	1,350	386	157	138	138
14	176	205	200	190	236	1,680	5,100	1,270	409	160	135	135
15	178	200	194	195	224	1,810	11,500	1,190	459	167	131	135
16	178	200	194	190	227	1,950	8,700	1,150	451	164	131	138
17	181	205	200	185	224	2,310	5,600	1,110	438	164	133	133
18	181	211	208	180	224	2,530	4,000	1,040	425	162	131	133
19	183	211	211	175	233	2,770	3,240	1,110	413	164	131	133
20	181	214	208	170	227	2,260	2,960	1,040	390	164	131	139
21	183	214	208	158	230	1,720	2,840	1,110	370	162	131	140
22	183	211	211	155	230	1,430	2,960	1,040	351	162	129	143
23	181	211	214	155	239	1,190	2,710	965	333	160	127	140
24	183	208	217	165	239	1,150	2,480	895	315	157	129	140
25	183	208	220	175	239	1,110	2,200	795	297	157	131	140
26 27 28 29 30 31	186 189 194 197 197 192	205 200 197 197 194	220 226 223 217 226 205	187 200 210 212 215 215	242 251 251 - -	1,000 1,040 1,270 1,800 2,000 2,100	2,100 2,100 2,200 2,100 2,000	730 664 622 582 566 588	280 264 254 245 236	157 152 145 143 140 140	133 131 129 127 127 129	143 145 143 150 145

Month	Second- foot-days	Maximum	Minimm	Mean	Run-off in acre-feet
October	5,528 6,068 6,400	197 214 226	166 192 192	178 202 206	10,960 12,040 12,690
Calendar year 1936	461,318	14,600	146	1,260	915,000
January February Rarch April May Jun Jun Jun Jun Jun August August	5,807 6,565 36,999 106,010 38,417 12,282 5,256 4,118 4,090	220 254 2,770 11,500 1,950 594 230 140 150	155 220 254 1,900 566 236 140 127 129	187 234 1,194 3,534 1,239 409 170 133 136	11,520 13,020 73,390 210,300 76,200 24,360 10,430 8,170 8,110
Water year 1936-37	237, 540	11,500	127	651	471,200

Owyhee Reservoir at Owyhee Dam, near Nyssa. Oreg.

Location.- Staff gage, lat. 43°38', long. 117°15', in sec. 20, T. 22 S., R. 45 E., at Owyhee Dam, 21 miles southwest of Nyssa, Oreg. Gage readings are elevations above mean sea level.

Records available .- October 1932 to September 1937.

Extremes. Maximum contents during year, 1,122,600 acre-feet Apr. 16 (elevation, 2,670.06 feet); minimum, 917,100 acre-feet Sept. 30 (elevation, 2,652.67 feet). 2,670.27 feet); maximum contents, 1,125,500 acre-feet June 11, 1936 (elevation, 2,670.27 feet); no storage Oct. 1-16, 1932.

Remarks. - Records excellent. Owyhee Dam, built by Bureau of Reclamation, was completed in September 1932. Storage of water for irrigation began Oct. 16, 1932. Capacity of reservoir at elevation 2,870 feet is 1,122,000 acre-feet above elevation 2,367.5 feet (sluice gates) and 715,000 acre-feet above elevation 2,590.2 feet (diversion tumnel). According to plan for operation water level will not generally be drawn below elevation 2,590.2 feet. Water is released through diversion tunnel for irrigation of lands west of Snake River near Homedale, Idaho, and near Nyssa and Ontario, Oreg.; it is also released through dam to river for diversion by Owyhee Canal, about 18 miles downstream. Gage-height record and capacity table furnished by Bureau of Reclamation.

Monthly elevation and contents, water year October 1936 to September 1937

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	2,661,70	1.019.000	_
Oct. 31	2,660.70	1,008,000	-11,500
Nov. 30	2,661.38	1,016,000	+8,000
Dec. 31	2,662.26	1,026,400	+10,400
Jan. 31	2,663.08	1,036,300	+9,900
Feb. 28	2,663.15	1,037,100	+800
Mar. 31	2,667.45	1,089,700	+52,600
Apr. 30	2,670.00	1,121,800	+32,100
May 31.	2,669.65	1,117,400	-4,400
June 30	2,667.36	1,088,600	-25,800
July 31	2,662.22	1,025,900	-62,700
Aug. 31	2,656.92	964,300	-61,600
Sept. 30	2,652.67	917,100	-47,200
The year			-102,700

Owyhee River below Owyhee Dam, Oreg.

Location. - Water-stage recorder, lat. 43°39', long. 117°15', in sec. 17, T. 22 S., R. 45
E., three-quarters of a mile below Owyhee Dam. Zero of gage is 2,343.67 feet above mean sea level.

Records available .- February 1929 to September 1937.

Extremes. Maximum discharge during year, 14,100 second-feet Apr. 15 (gage height, 12.60 feet); minimum (estimated), 9 second-feet Sept. 19-30.

1929-37: Maximum discharge, 14,600 second-feet Mar. 21, 1932 (gage height, 12.79 feet); no flow for a few hours Aug. 8, 9, 1932, when temporary diversion tunnel above gage was closed.

Remarks.- Records fair. Discharge for Oct. 2-9, Oct. 22 to Feb. 15, Mar. 18 to Apr. 2, Sept. 19-30 computed on basis of leakage data furnished by Bureau of Reclamation. Diversions for irrigation above station. Flow regulated since Oct. 16, 1932, by Owyhee Dam, which was completed by Bureau of Reclamation in September 1932. Water-stage recorder inspected and a few discharge measurements furnished by Bureau of Reclamation.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0	12	4.0	1,240
.3	27	5.0	1.970
.6	49	6.0	2.900
1.0	91	7.0	4.060
1.5	176	8.0	5.450
2.0	294	10.0	8.950
2.5	443	12.0	12,900
3.0	860		

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	25					520 520 500 500 500	11 11 790 2,500 2,800	1,670 1,200 1,260 990 990	243 243 243 243 243 243	241 241 241 241 241	195 193 193 193 193	212 212 197 186 186
6 7 8 9	89				10	500 500 500 500 500	3,170 2,860 1,900 1,140 2,180	1,020 1,020 990 1,280 1,320	243 243 243 243 243 243	241 241 241 241 243	193 193 193 201 217	186 186 186 186 186
11 12 13 14 15	206 201 204 210 210					500 500 500 500 500	2,500 3,220 2,900 3,820 11,200	990 687 384 883 564	243 243 243 229 193	263 263 263 263 263 263	217 217 217 217 217 217	186 172 160 160 160
16 17 18 19 20	208 208 206 208 91				149 500 500 500 500	350	9,420 6,090 3,710 3,230 2,500	436 604 364 1,310 256	193 193 193 193 193	263 263 263 263 263 263	217 215 217 217 217	160 160 69
21 22 23 24 25	15				480 480 500 500 500	11	2,770 2,500 2,700 2,420 1,970	256 243 248 309 256	193 193 193 193 193	263 250 246 243 243	217 217 215 217 212	9
26 27 28 29 50 31	12				500 500 500		2,010 1,660 1,540 2,110 1,140	263 236 238 243 243 243	193 212 241 241 241	243 226 195 195 195 195	212 212 212 212 212 212 212]

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,297	210	_	74.1	4,560
November	360	_	-	12	714
December	372	-	-	12	738
Calendar year 1936	248,632	11,700	-	679	493,200
January	341	_	-	11	676
February	6.259	500	_	224	12.410
March	8.056	520	_	260	15,980
April	87.072	11.200	11	2,902	172,700
May	20.986	1.670	236	677	41.630
June	6,639	243	193	221	13,170
July	7.536	263	195	243	14,950
August	6.482	217	193	209	12.860
September	3,258	212	-1-	109	6,460
Water year 1936-37	149,658	11,200	-	410	296,800

Boise River near Twin Springs, Idaho

Location. - Water-stage recorder, lat. 43°40', long. 115°44', in sec. 27, T. 4 N., R. 6
E., a quarter of a mile above Birch Creek, 1½ miles above flow line of Arrowrock
Reservoir, 4 miles below Twin Springs, and 13 miles above Arrowrock.

Drainage area .- 830 square miles.

Records available .- March 1911 to September 1937.

Average discharge .- 26 years, 1,100 second-feet.

Extremes. - Maximum discharge during year, 3,610 second-feet May 5 (gage height, 4.94 feet); minimum discharge recorded, 159 second-feet Nov. 29 (gage height, 1.67 feet). 1911-37: Maximum discharge, 10,300 second-feet May 17, 1927 (gage height, 8.30 feet); minimum, 133 second-feet Dec. 15, 16, 1935 (gage height, 1.56 feet).

Remarks.- Records good except those for periods of ice effect, Dec. 1-3, 12-16, Jan. 4 to Feb. 26, Which were computed on basis of one discharge measurement, weather records, and records for Arrowrock Reservoir and are fair. Discharge for May 29 to June 5 computed on basis of records for South Fork of Boise River near Lenox; those for Aug. 15-20 interpolated. No diversions or regulation.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

00	Oct. 1 to Feb. 26				Feb. 27 to Sept. 30					
1.70 1.60 1.90 2.00	167 199 235 275	2.10 2.20 2.30	320 370 425	1.e0 2.20 2.60	207 380 636	3.00 985 3.40 1,415 3.80 1,920	4.60	2,470 3,060 3,690		

Day	Oct.	Nov.	Dee.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	280 280 280 280 280 254	255 255 186 293 325	220 280 270 271 306	259 206 235		326 350 360 355 340	621 854 724 621 578	1,440 1,910 2,470 3,060 3,370	2,300 2,100 2,050 2,150 2,000	827 774 724 668 652	312 312 308 298 290	233 233 229 233 269
6 7 8 9 10	284 280 280 275 275	311 288 243 217 255	355 376 330 320 280			375 396 418 441 490	556 503 503 536 556	3,290 3,140 2,910 2,910 2,980	1,780 1,640 1,650 1,590 1,910	668 607 578 556 523	281 277 281 277 273	256 244 237 237 237
11 12 13 14 14	275 271 271 271 271	284 284 284 293 293	243 250 270 300 320		300	556 592 614 629 691	57e 600 900 2,190 2,470	2,760 2,540 2,540 2,980 3,140	1,750 1,560 1,480 1,390 1,380	490 472 459 472 478	269 264 260 256 254	233 233 233 233 233 226
16 17 18 19 20	27 5 275 271 275 275	302 311 302 288 275	350 330 316 302 285	275		758 707 629 530 496	2,020 1,520 1,330 1,240 1,260	3,060 3,060 3,210 3,290 2,910	1,440 1,540 1,360 1,290 1,380	441 424 402 391 380	251 248 245 242 239	226 222 218 222 233
21 22 25 24 25	280 275 280 280 288	275 259 247 239 217	288 306 298 293 298			453 453 459 435 435	1,490 1,380 1,190 1,040 1,060	2,680 2,840 3,210 3,140 3,210	1,570 1,740 1,600 1,300 1,130	370 360 365 355 365	237 233 233 233 233 237	240 244 237 237 240
26 27 28 29 30 31	284 284 284 280 284 288	235 224 006 189 210	284 280 271 235 255 259		321 316 - - -	472 503 516 516 543 556	1,500 2,090 1,970 1,580 1,330	3,140 3,140 3,290 3,150 2,850 2,500	1,020 966 928 909 890	370 350 335 326 316 316	237 233 237 237 237 237	23'/ 237 233 237 237 237

	Second-				Per	1nches 0.39 .35 .41 18.96 .38 .38 .69 1.56 4.04 2.06	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October	8,635 7,878 9,044	288 325 376	271 186 220	279 263 292	0.336 .317 .352	.35	17,130 15,630 17,940
Calendar year 1936	422,892	8,460	186	1,155	1.39	18.96	838,700
January February Harch April Hay June June July August September	8,400 e,437 15,394 34,790 90,120 46,093 14,814 8,028 7,066	758 2,470 3,370 2,300 827 312 269	326 503 1,440 890 316 233 218	271 301 497 1,160 2,907 1,536 478 259 236	.327 .363 .599 1.40 3.50 1.85 .576 .312 .284	.38 .69 1.56 4.04	16,660 16,730 30,530 69,000 176,800 91,420 29,380 15,920 14,020
Water year 1936-37	258,699	3,370	186	709	.854	11.60	513,200

Arrowrock Reservoir at Arrowrock, Idaho

Location.- Staff gage, lat. 43°36', long. 115°55', in E½ sec. 13, T. 3 N., R. 4 E., at Arrowrock, 22 miles by road east of Boise. Zero of gage is at mean sea level.

Records available .- October 1917 to September 1937.

Extremes. - Maximum contents during year, 288,400 acre-feet June 23 (gage height, 3,214.3 feet); minimum, 1,842 acre-feet Oct. 15 (gage height, 2,983.5 feet). 1917-37: Maximum contents, those of June 23, 1937; no storage during period in each of several years when natural flow was passing through reservoir.

Remarks.- Capacity of reservoir was increased during 1937 to 291,500 acre-feet (gage height 3,216.0 feet highest position of movable spillway crest). Stored water is used for irrigation of lands in Boise Valley. Gage-height record and table of storage capacity furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	HOY.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	9,050 8,900 8,721 8,460 8,199	21,520 22,760 23,890 24,770 26,060	55,080 55,560 56,160 54,600 54,240	19,420 20,320 21,310 22,380 23,490	54,600 55,920 57,000 58,440 59,880	74,960 73,980	100,400 104,500 106,900	208,000 206,800 207,200 209,000 212,200	283,100 282,800 282,800	256,800 252,300	137,400 134,000 130,800 127,200 123,800	35,690 36,010 36,170 36,250 36,490
6 7 8 9 10	8,030 7,806 7,750 7,666 7,610	27,490 28,840 30,100 31,180 32,280	54,000 53,670 53,120 52,350 51,580	24,770 26,060 26,900 27,620 28,500	61,040 62,210 63,380 64,550 65,720	70,400 69,360 68,450	110,500 111,500	221,300 225,000 228,100	280,700	239,300 234,900 230,400	120,100 116,300 112,200 108,400 104,300	36,570 36,570 35,930 33,330 29,750
11 12 13 14 15	6,470 5,246 4,189 2,366 1,842	33,330 34,580 35,770 36,890 38,190	49,930 47,700 46,300 44,600 43,230	29,540 30,680 31,840 33,110 34,420	67,020 68,320 69,100 69,750 70,660	67,800 68,320 69,490	119,500 121,900 127,200	237,200 239,500 241,900	282,800 282,800	221,100 216,200 211,500 206,500 201,900	100,600 96,860 93,100 89,100 85,100	26,380 23,380 19,870 16,580 13,280
16 17 18 19 20	1,931 1,931 1,931 1,970 4,150	39,270 40,620 41,970 43,140 44,300	42,060 41,340 39,630 38,350 36,980	35,770 36,980 38,270 39,540 40,710	71,440 72,090 73,140 73,840 74,540	79,720 83,150 86,450	162,800	254,000 258,200 262,500	285,500 285,500	197,400 193,400 189,700 184,800	81,200 77,480 73,840 70,660 66,760	10,240 8,402 7,946 7,475 7,694
21 22 25 24 25	5,850 7,610 9,205 11,040 12,440	45,400 46,500 47,600 48,610 49,710	35,690 34,340 33,110 31,620 30,180	41,880 42,690 43,700 44,900 46,100	74,820 75,240 75,940 76,500 77,060	93,420 94,700 95,180	187,100 191,000 194,300	271,200 273,500 277,100	286,400 285,500	176,400 172,700 169,100 165,300 161,500	62,860 59,040 55,200 51,250 47,400	8,315 8,960 9,577 10,270 10,940
26 27 28 29 30 31	13,950 15,220 16,580 17,770 19,420 20,220	50,810 51,690 52,460 53,230 54,000	29,050 27,490 25,940 24,010 22,600 21,040	47,200 48,400 49,710 50,920 52,240 53,450	77,480 77,480 77,060	95,180 96,340 95,670	201,500 205,800 208,000	282,500 284,000 284,900	279,200 275,900 272,600 268,900	157,700 154,400 151,000 147,600 144,200 141,600	44,400 41,520 38,680 35,770 34,970 35,29 0	11,560 12,160 12,720 12,860 12,610

Note.- These values do not allow for possible silt affect which project officials indicate may have reduced the total capacity of the reservoir as much as 5,000 to 6,000 acre-feet.

Boise River at Dowling ranch, near Arrowrock, Idaho

Location. - Water-stage recorder, lat. 43°35', long. 115°58', in sec. 15, T. 3 N., R. 4 E., at Dowling Ranch, three-quarters of a mile above Moore Creek, and 4 miles below Arrowrock.

Drainage area. - 2,230 square miles.

Records available .- March 1911 to September 1937.

Average discharge. - 26 years, 2,200 second-feet.

Extremes.- Maximum discharge during year, 5,940 second-feet May 28 (gage height, 6.11 feet); minimum discharge, 2 second-feet Oct. 30 to Nov. 5, Nov. 9, 27; minimum gage height, 0.71 foot Nov. 27.

1911-37: Maximum discharge, 17,600 second-feet May 11, 1928 (gage height, 9.55 feet); minimum discharge, 2 second-feet Nov. 19-27, 1935, Feb. 1-10, Oct. 30 to Nov. 5, Nov. 9, 27, 1936; minimum gage height, 0.62 foot Nov. 21, 22, 1935.

Remarks.- Records good. Discharge for period of ice effect, Jan. 6 to Feb. 14, and for Mar. 14 computed on basis of Arrowrock gate openings, one discharge measurement and weather records. Discharge for Dec. 28, 27, Mar. 12 interpolated. Flow regulated by storage in Arrowrock Reservoir. No diversions above station. Gage-height record furnished by Bureau of Reclamation. Three discharge measurements furnished by water-master for Boise River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Got.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	633 633 640 647 640	8 8 8 8 8	3 431 698 814 654	609 10 8 6 5	3 3 3 4 5	1,050 1,150 1,250 1,300 1,360	814 362 361 817 915	3,730 3,930 4,340 4,340 4,340	4,030 3,830 3,930 3,930 3,730	3,540 3,540 3,540 3,440 3,440	2,190 2,190 2,190 2,190 2,260	302 306 322 344 352
6 7 8 9 10	640 619 598 598 514	3 3 3 2 3	782 1,010 1,120 1,210 1,270	4 4 4 4	4 3 3 3 3	1,410 1,410 1,410 1,410 1,360	838 838 594 410 410	4,240 4,240 4,030 4,130 4,030	3,640 3,540 3,350 3,350 3,080	3,440 3,440 3,440 3,350 3,350	2,340 2,420 2,420 2,490 2,340	352 712 1,250 1,980 2,050
11 12 13 14 15	951 996 1,080 996 516	3 4 4 5 4	1,300 1,300 1,360 1,360 1,300	4 4 4 4	4 150 350 300 282	1,190 1,120 1,050 500	410 410 415 193 17	3,830 3,830 3,830 3,830 3,640	2,820 2,740 2,650 2,490 2,340	3,350 3,350 3,260 3,260 3,170	2,260 2,260 2,260 2,260 2,260	1,980 1,910 1,980 1,910 1,780
16 17 18 19 20	579 579 579 271 6	3 3 3 3 3	1,360 1,280 1,300 1,280 1,300	3 3 3 2	270 262 298 326 370	19 18 17 14 12	16 14 13 13 13	3,640 3,730 3,830 3,830 4,030	2,190 2,190 2,340 2,340 2,340	3,050 2,990 2,900 2,900 2,820	2,260 2,260 1,980 2,120 2,260	1,440 560 572 485 212
21 22 25 24 25	4 4 6 5 4	3 3 3 3 3	1,360 1,280 1,280 1,280 1,280	3 3 3 3 3	385 344 366 405 447	155 446 691 924 1,090	12 761 1,240 1,250 1,560	4,130 4,240 4,130 4,440 4,660	2,490 2,650 2,990 2,520 2,900	2,740 2,570 2,570 2,570 2,570	2,190 2,190 2,260 2,340 2,050	229 226 232 222 204
26 27 28 29 30 31	4 3 3 3 2 2	3 3 3 3 -	1,320 1,370 1,410 1,360 1,360 1,300	3 3 3 3 3 3	553 814 1,020 - -	1,120 1,090 1,050 1,030 960 830	2,050 2,190 2,620 2,900 3,260	5,110 5,100 5,340 5,450 5,100 4,550	3,170 3,350 3,350 3,440 3,540	2,420 2,340 2,260 2,260 2,190 2,260	1,910 1,910 1,840 1,460 310 282	208 212 226 540 528

Month	Second- foot-days	Maximum	Minimm	Mean	Run-off in
Gotober	13,055	1,080	2	421	25,890
November	35,732	1,410	2 3	1,153	70,870
Calendar year 1936	878,230	15,100	2	2,400	1,742,000
January	726	609	3	23.4	1,440
February		1,020	3	249	13,840
MarchApril	26,453 25.715	1,410 3,260	12 12	853 857	52,470
May	131.620	5.450	3.640	4.246	51,000 261,100
June	91,550	4.030	2.190	3.052	181,600
July	92,350	3.540	2,190	2,979	183,200
August	63,952	2,490	282	2.063	126,800
September	23,626	2,050	204	788	46,860
Water year 1936-37	511,848	5 ,450	2	1,402	1,015,000

Boise River (north channel) near Eagle, Idaho

Location. - Water-stage recorder, lat. 43°41', long. 116°22', in NW‡ sec. 17, T. 4 N., R. 1 E., 550 feet below mouth of Dry Creek, 1 mile southwest of Eagle, and three miles above junction with south channel of Boise River at lower end of Eagle Island.

Records available .- December 1935 to September 1937 (incomplete).

Extremes. Maximum discharge recorded during year, 382 second-feet Mar. 17 (gage height, 1.35 feet); minimum, 23 second-feet Apr. 19 (gage height, 0.30 foot).

1935-37: Maximum discharge during periods of record, 501 second-feet Feb. 22, 1936 (gage height, 2.18 feet), from rating curve extended above 250 second-feet; minimum, that of Apr. 19, 1937.

Remarks. - Records good. Discharge for period of ice effect, Jan. 20-22 computed on basis of weather records and with records for stations on nearby streams. Flow regulated by storage in Arrowrock Reservoir and by numerous canal diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Cot.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	132	97	68	36	104	119	52				-	139
Ž١	126	91	62	53	104	91	139		1		-	149
2 3	123	94	59	79	104	82	136		l		-	146
4	123	97	56	70	113	70	91	i	1	i '	-	136
5	119	97	88	79	126	65	91				-	156
6	119	94	65	85	1 16	62	110				-	166
7	126	91	59	97	107	65	91		l		-	146
8	91	76	53	94	116	62	79.		I		-	132
9	113	70	50	68	107	62	76		1	1	-	149
10	110	68	48	79	100	62	70			1	-	152
11	100	68	50	85	110	62	42				_	129
12	104	73	4e	94	119	59	42			1	-	116
13	104	76	48	94	100	70	36		Į.	l	113	110
14	110	79	45	97	180	82	76			l	104	119
15	119	82	45	104	129	216	65			i	94	123
16	139	82	45	107	97	308	48				129	142
17	177	85	42	104	79	362	36				162	152
18	195	94	42	107	73	358	31		Į.	l .	136	100
19	198	94	45	104	70	323	23			1	119	97
80	104	82	42	100	65	206	-				79	97
21	94	79	45	95	88	110	_		ŀ		113	113
22	129	79	42	95	82	85	-		i	1	113	110
25	116	62	42	100	73	85	-	1	1	1	123	116
24	110	79	42	100	76	70	-	1	1		129	129
25	107	76	42	100	79	62	-		1		129	152
26	104	73	39	104	73	73	_				166	142
27	100	73	39	104	76	68	_	l	J	i	126	146
28	104	73	39	104	132	68	- '	1	1	1	126	132
29	100	65	39	104		65	_	l	1	i	119	119
50	100	68	39	104	-	62	-	1	1	1	132	116
31	100	-	36	104	-	68	-	l	Ì	1	146	-

Month	Second- foot-days	Maximum	Minimum	Mean .	Run-off in aore-feet
October	3,696	198	91	119	7,330
November	2,437 1,504	97 86	65 3 6	01.2 48.5	4,830 2,980
Calendar year					
January		107	36	91.9	5,650
February		180	65	99.9	5,550
MarchApril 1-19,	3,682 1,364	362 139	59 23	119 71.8	7,500 2.710
Мау	-,	-	-	-	
June		-	-	-	-
July		-	-	-	-
August 13-31	2,348	166	79	124	4,660
September	3,931	166	97	131	7,800
Water year					

Boise River (south channel) near Eagle, Idaho

Location. - Water-stage recorder, lat. 43°40'30", long. 116°24'30", in NW\u00e4 sec. 24, T. 4
N., R. 1 W., 450 feet above bridge on Darland Lane, 600 feet below Phyllis Canal heading, 1 mile above junction with north channel of Boise River at lower end of Eagle
Island, and 3\u00e4 miles southwest of Eagle.

Records available .- December 1935 to September 1937 (incomplete).

Extremes. Maximum discharge recorded during year, 475 second-feet Apr. 14 (gage height, 3.03 feet), from rating curve extended above 120 second-feet; minimum, 1.8 second-feet Apr. 19 (gage height, 0.40 foot).

1935-37: Maximum discharge during periods of record, that of April 14, 1937; minimum, that of April 19, 1937.

Remarks.- Records good. Discharge for period of missing gage heights, Jan. 3-27 inter-polated. Flow regulated by storage in Arrowrock Reservoir and by numerous diversions above station.

Day	Oct.	HOT.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	36	26	26	27	46	24				-	18
3	3.7	36	26	25	28	34	26				-	19
8	3.7	35	26	25	29	31	32		l		_	19
4	3.7	34	26	25	32	29	24	1	ļ		_	17
5	3.7	33	30	25	42	29	24		l		-	22
6	3.7	33	28	25	40	27	24		1		_	25
7	4.0	32	26	25	34	26	24		ł	1	- 1	24
8	4.6	30	26	25	35	26	23	l	1	1	-	19
9	4.3	30	27	25	31	25	22	ŀ	§	1	-	24
10	4.3	30	26	25	30	24	24				-	20
11	4.0	30	26	25	32	24	49		1		-	18
12	4.0	30	25	25	37	24	33	į .	1	1	-	14
15	4.0	29	25	25	39	26	41	ļ	1		47	13
14	4.6	28	25	25	66	28	136	ł			40	14
15	7.1	29	24	25	53	77	143			ļ	36	14
16	46	29	24	25	40	145	24	1		į.	27	12
17	95	29	24	25	36	186	16		1		24	52
18	130	29	24	25	35	182	2.8	ł	i.	i	20	103
19	121	32	24	25	34	139	1.9	İ	1	1	14	74
20	31	31	24	25	31	70	-	1			19	20
21	108	29	24	25	33	36	_	1	ļ		24	44
22	46	29	24	25	33	29	_			1	32	57
25	40	28	24	25	32	27	_	i		1	44	31
24	39	28	24	25	32	26	l	l		1	31	19
25	38	28	25	25	32	24	-			1	18	25
26	37	27	25	25	31	24	<u>-</u> -	i			30	19
27	36	26	26	25	31	23	-	1		1	31	15
28	36	26	26	25	42	22	-	1			25	14
29	36	26	26	26	-	22	-	l		1	20	11
30	36	26	26	26	-	22	- 1	ł	I	1	19	10
31	36	-	26	26	-	23	-	i	I	1	20	-

Month	Second- foot-days	Maximum	Minimum	Mean	Rum-off in acre-feet
October. November. December.	974.7 698 790	130 36 30	3.7 26 24	31.4 29.9 25.5	1,930 1,780 1,570
Calendar year					
January, February Barch. April 1-19 Kay June July August 15-51 Beptember. Water year	997 1,476 693.7 -	26 66 186 143 - - 47 103	25 27 22 1.9 - - 14 10	25.1 35.6 47.6 36.5 - - 27.4 26.2	1,550 1,980 2,930 1,380 - - 1,030 1,560

Boise River at Notus, Idaho

Location. - Water-stage recorder, lat. 43°43', long. 116°48', in SE¼ sec. 34, T. 5 N., R. 4 W., 360 yards upstream from steel highway bridge, a quarter of a mile southeast of Notus, and 7 miles northwest of Caldwell.

Records available .- April 1920 to September 1937.

Average discharge. - 15 years (1920-22, 1924-37), 1,040 second-feet.

Extremes.- Maximum discharge observed during year, 1,530 second-feet May 30 (gage height, 3.73 feet); minimum, 18 second-feet Aug. 26 (gage height, 0.13 foot).

1920-37: Maximum discharge observed, 14,500 second-feet May 19, 20, 1921; maximum gage height, 7.90 feet Apr. 24, 25, 1936; minimum discharge, 10 second-feet Aug. 18, 1920.

Remarks.- Records good. Discharge for Sept. 22-30 computed on basis of once-daily readings of staff gage at former site. Station is below all diversions for irrigation in Boise Valley. Flow regulated by storage in Arrowrock Reservoir. Numerous irrigation diversions above station.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet) (Shifting-control method Oct. 16 to Mar. 18)

0.10	16	1.50	226	2.70	595
.30	30.5	1.70	275	2.90	705
.50	50.5	1.90	330	3.10	855
.70	75	2.10	390	3.30	1.030
.90	106	2.30	450	3.50	1.240
1.10	141	2.50	520	3.70	1.490
7 30	101				

Day	Get.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2	44 46	496 527	438 435	375 357	414	541 485	420 478	52 38	341 132	29 26	30 33	22 22 24 23 24
3	49	530	429	372	420 423	464	502	44	57	26	33	24
4	54	541	423	399	441 488	444	444	s1	40 33	25	32 31	23
5	55	548	429	411	488	429	426	145	33	23	31	24
6	65 80	544	447	390	488	420	460	295	49 54 39 39	23 28	27 26	28 26 28 29 28
8	66	538 524	429 435	369 345	457 447	417 408	444	90	54	28	26	26
9	61	516	423	372	447	408 405	414 375	47	39	26	29 30	28
10 l	59	510	408	408	420	402	369	52 8e	68	26 29	30	29
Ī.,		1			1	1 1	000	. ~	00	1		ا ک
11	54	502	402	393	435 450 471	402 399	369	109	188	27 27	2e	29
12 13	50 48	499	399	390	450	399	308 286	70	188 194	27	27	30
14	48 49	496 496	393 393	390 408	471 516	417 499	286	59	143	28	29	29
15	80	499	396	423	595	474	302 438	70 5 9 60 56	170	28 2 9	29 29 28	29 30 29 27 26
1 1	- O	100	220	1200	000	3/3	4-58	96	168	29	26	26
16 17	147	496	393	420	520	747	294	46	118	29	27	26
17	291	485	387	420 423	520 47 1	880	101	56	158	30	26	24
18	432	485	387	426	450	967	134	55	136	27	27	22
19 20	506 499	496 492	387 384	399 384	441 423	889	87 57	113 233	136 113 113	24 26	27 28	26 24 22 31 34
1 1	400	492	264	384	423	761	57	233	113	26	28	34
21 22 23	467 399	478 471 468	387	396	420 435 444	595	45	181	108	26	28	36
22	399	471	387 387	414 414	435	471	84	160	108 71	26 27	28 27	36 34
24	390 447	468 460	387 384	414 417	444	471 450 429	109 240 121	145	l 56	27	25	35
25	468	454	381	411	457 460	429	240	123	49 48	29	24 20	35
ıı	-30	104	361	-111	400	411	121	113	48	26	20	36
26 27	457	450	378	420	464	402	89	276	46	27	19	36
27	444	444	384	420 423 423	460	402	152	765	42	27 29	23	36 35
28 29	438 457	450 441	378 375	423	457	393	98	726	41	29	26	34
30	457	438	372	420	-	390 387	106	954	36	28	25	33
31	454	200	378	414	-	393	106	1,360 928	29	29 29	24 23	33
					<u></u>			028		28	_~	

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,603 14,774 12,408	506 548 447	44 438 372	245 492 400	15,080 29,300 24,610
Calendar year 1936	463,801	13,000	23	1,267	920,000
January February March April March April April August August Bagust Beptember	12,426 12,508 15,573 7,938 7,520 2,879 842 841 879	426 595 967 502 1,360 341 30 33	345 414 387 45 38 29 23 19	401 457 502 265 243 96.0 27.2 27.1 29.3	24,650 25,400 30,890 15,740 14,920 5,710 1,670 1,670 1,740
Water year 1936-37	96,491	1,360	19	264	191,400

Diversions from Boise River, Idaho

Twenty-seven canals and several small farm laterals divert water from Boise River for irrigation below mouth of Moore Creek and between gaging stations at Dowling ranch and Notus. Records for the years 1919 to 1937 are available. Record of daily diversions subsequent to 1915 on file in office of Idaho Commissioner of Reclamation.

Daily gage-height records were obtained, frequent discharge measurements made, and records summarized under direction of W. E. Welsh, watermaster for Boise River.

Total amount of water, in acre-feet, diverted by each canal during irrigation season of 1937.

•	
Main canal of Bureau of Reclamation	537,350
Penitentiary	2,150
Ridenbaugh	116,830
Bubb	3.950
Consumers (Cruzen)	6,990
Boise City No. 1	8.690
Settlers	36.180
Thurman Mill	9.360
Farmers Union (includes Boise Valley diversion)	47.030
New Union (Little Union)	4.410
New Dry Creek (Dry Creek)	13,530
Ballantine	3,260
7 Eagle Island Canals	10.910
Middleton Water Co	26,060
Middleton Mill Ditch	14.880
Phyllis	S2,620
Eureka No. 1	7,260
Pioneer (Little Pioneer)	8.730
Canyon County	18,030
Caldwell High Line	19.540
Riverside No. 2	43.810
Farmers Cooperative	69.580
Canyon (Campbell)	4,250
Seibenberg	2.640
Pioneer Dixie	8,010
Bureka No. 2	10,770
Upper Center Point	2.670
Lower Center Point	2,530
Miscellaneous	

Combined monthly discharge of canals diverting from Boise River, Idaho, 1937

Month	Dischar	ge in second	Run-off in	
MOIICH	Maximum	Minimum	Mean	asre-feet
April	4.072	850	1.692	100.700
May	5.751	4.410	5.364	329,800
June	5,232	3,434	4,132	245,800
July	4,264	2,760	3,601	221,400
August	2,992	692	2,560	157,400
September	2,598	705	1,245	74,090
The period	-	-	- 1	1,129,000

South Fork of Boise River near Lenox. Idaho

Location. - Water-stage recorder, lat. 43°30', long. 115°41', in sec. 24, T. 2 N., R. 6
E., 1# miles above mouth of Smith Creek, 4 miles above flow line of Arrowrock Reservoir, 4 miles west of discontinued Lenox post office, 13 miles above mouth of river, and 17 miles above Arrowrock Dam.

Drainage area. - 1,090 square miles.

Records available .- March 1911 to September 1937.

Average discharge. - 26 years, 947 second-feet.

Extremes.- Maximum discharge during year, 3,060 second-feet May 6 (gage height, 6.00 feet); minimum discharge recorded, 135 second-feet Aug. 19 (gage height, 1.82 feet). 1911-37: Maximum discharge, 9,200 second-feet May 15, 1917 (gage height, 9.53 feet); minimum discharge, 111 second-feet May. 10, 1934; minimum gage height, 1.66 feet Sept. 5-7, 1931.

Remarks.- Records good except those for periods of ice effect or missing gage heights,

Dec. 1-5, 12-14, Dec. 31 to Mar. 15, which were computed on basis of one discharge
measurement, weather records, and records for Arrowrock Reservoir, and are fair. No
diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.50	130	3.40	772	5.00	1.975
2,20	245	3.50	1.008	5.40	2,375
2.60	391	4.20	1.280	5.80	2,815
3.00	567	4.60	1,605	6.20	3,315

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	252 252 245 248 239	283 279 232 235 304	210 270 260 250 300			350	676 783 697 631 606	1,520 1,740 2,170 2,590 2,820	1,700 1,560 1,560 1,700 1,600	616 572 544 498 449	223 219 216 213 207	161 161 158 150 148
6 7 8 9 10	235 245 252 252 252	311 304 283 252 259	345 341 326 311 276			425	606 558 544 582 621	2,940 2,820 2,590 2,480 2,590	1,440 1,320 1,280 1,440 1,400	488 493 454 445 436	198 192 189 189 183	163 177 177 172 161
11 12 15 14 15	252 252 248 248 252	269 269 279 290 293	245 250 260 290 311			}550	641 676 916 1,880 2,170	2,480 2,270 2,270 2,380 2,480	1,280 1,210 1,140 1,070 1,070	412 391 372 364 360	183 172 161 155 152	150 152 152 152 152 158
16 17 18 19 20	252 255 252 259 262	290 301 304 290 276	319 311 293 290 276			616 616 587 520 471	2,070 1,740 1,560 1,440 1,480	2,480 2,480 2,590 2,590 2,380	1,070 1,110 1,040 1,010 977	352 337 322 319 297	152 148 148 149 142 138	163 163 161 155 155
21 22 23 24 25	262 259 259 259 272	272 269 269 259 242	276 283 256 279 286			454 436 454 428 412	1,700 1,700 1,480 1,240 1,240	2,270 2,170 2,380 2,380 2,480	977 1,010 977 886 806	286 272 262 259 259	142 142 142 145 150	158 169 175 175 175
26 27 28 29 30 31	279 276 279 276 279 283	235 226 213 204 204	283 286 272 245 226 250			424 462 480 493 534 577	1,520 1,930 1,980 1,700 1,480	2,480 2,380 2,480 2,380 2,170 1,830	750 713 652 656 661	259 252 248 245 235 252	152 155 161 155 155 161	183 175 172 172 177

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	7,990 7,996 8,706	283 311 345	235 204 210	258 267 281	0.237 .245 .258	0.27 .27 .30	15,850 15,860 17,270
Calendar year 1936	356,5 0 1	7,620	-	1,057	.970	13.18	767,200
January Pebruary Harch April Hay June July August September	7,750 7,840 14,589 36,847 74,060 34,095 11,330 5,240 4,920	- 616 2,170 2,940 1,700 616 223 183	544 1,520 656 232 138 148	250 280 471 1,228 2,389 1,136 365 169 164	.229 .257 .432 1.13 2.19 1.04 .335 .156	.26 .27 .50 1.26 2.52 1.16 .39 .18	15,370 15,550 28,940 73,080 146,900 67,630 22,470 10,390 9,760
Water year 1936-37	221,363	2,940	138	606	-556	7.55	439,100

Little Camas Reservoir near Bennett, Idaho

Location. - Staff gage near left end of dam, lat. 43°21', long. 115°23', in NE 1/4 sec. 9, T. 1 S., R. 9 E., 4 miles northeast of Bennett and 22 miles northeast of Mountain Home.

Drainage area .- 31.8 square miles.

Records available .- March 1924 to September 1937.

Extremes. - Maximum stage observed during year, 4,961.40 feet May 14-19; minimum observed, 4,946.20 feet Sept. 1. 1924-37: Maximum stage, 4,965.5 feet May 26, 1928; practically no storage after irrigation season of each year.

Remarks.- Records good. Capacity of reservoir is 22,300 acre-feet between gage heights 4,831.0 and 4,965.0 feet. Water used for irrigation on about 5,000 acres of land in vicinity of Mountain Home. Gage-height record furnished by Mountain Home Irrigation District.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								_	60.30	56.62	51.30	46.20
2			Į			l	l	_	60.20	56.48	51.12	
3		l 1	1			ŀ		-	60.10	56.30	50.94	
4						l		-	60.00	56.16	50.76	
5		1	l					-	59.90	56,00	50,56	
6								-	59,80	55.88	50.38	
7		\ \ \			i	1	1	-	59.70	55.72	50.18	
8		1				ļ		-	59.60	55 . 5 6	49.98	
						1	1		59.50	55.40	49.80	1
10						i	ľ	61.10	59.35	55,24	49.60	
11								-	59.20	55.06	49.40	
12		i i		1	1	1	1	61.30	59.10	54.90	49.20	l
13		1					ł	61.30	59.00	54.72	49.00	
14		1 1				1		61.40	58.90	54.56	48.80	
15		1						61.40	58.70	54.40	48.60	
16								61.40	58.60	54.22	48.38	
17]				1)	61.40	58.50	54.04	48.18	l
18						1		61.40	58.40	53.86	47.96	1
19							J	61.40	58.20	53.66	47.72	j
20								61.30	58.10	53.50	47.50]
21					}	l		61.20	58.00	53.32	47.28	1
22								61.20	57.90	53.16	47.06	
23		53.46					l	61.10	57.80	52.98	46.78	
24		1]	j	J	60.96	57.60	52.80	46.58	ł
25								60 .90	57.50	52.60	46.36	ŀ
26						l	ļ	60.90	57.40	52.42	_	l
27		1				1	1	60.00	57.20	52.22	_	l
28		l			İ		I	60.70	57.00	52.06		I
29		J .			ļ	Į.	1	60.60	56 90	51.88	_	i
30					i	1	l	60.50	56.76	51.70	_	l
31					I	l	i	60.40	"-	51.52	_	l

Note. - Add 4,900 feet to obtain elevations referred to datum of the Mountain Home Irrigation District.

Little Camas Canal at heading, near Bennett, Idaho

- Location. Staff gage, lat. 43°21'30", long. 115°23', in sec. 9, T. 1 S., R. 9 E., 400 feet below Little Camas Reservoir, 4 miles northeast of Bennett, and 22 miles northeast of Mountain Home.
- Records available. June to November 1917, April 1924 to September 1937 (irrigation seasons only).
- Extremes. Maximum discharge during year, 61 second-feet June 24 (gage height, 2.21 feet); no flow Oct. 1 to May 12, Aug. 25 to Sept. 30. 1917, 1924-37: Maximum discharge, 77 second-feet Apr. 27-30, May 1, 3, 9, 1924; no flow during nonfrrigation seasons.
- Remarks.- Records good. Canal diverts water from Little Camas Reservoir in sec. 9, T. 1
 S., R. 9 E., and discharges it into Long Tom Creek Basin, where it is stored in Long
 Tom Reservoir for irrigation of 5,000 acres of land near Mountain Home. No diversions
 above gage. Flow regulated by head gates at Little Camas Reservoir. Gage-height record furnished by Mountain Home Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr	٠٠	May	June	July	Aug.	Sept.
1 2 5 4	-								0	59	60	52	
2			i		!				0	60 60	60 60	52	1
21		1	i					4	0	60	60	52 51	l
5									ŏ	60	60	52 52 51 51	
6									o	60	60	51	
7		1							0	60	60	51	
8		1			l		1		0	60	60	51	l
10		1	l '		1		İ		0	60	60	51 51 50	
- 1					1				0	60	60	50	
11 12 15		ŀ	l	·	l		i		0	60	60	50	
12		ļ .	l		ŀ				3	60	60	50	ł
18					ł				10	60	59	49	1
14		i							12	60	59	49	
10								ı	26	60	59	49	
16		ļ							34	60	59	49	
17		i				l i		1	40	60	59 59	48	
18 19									42	60	58	48	
19		i							45 47	60	57	48 48 47	
20									47	60	58	47	
21 22								l	50	60	58	47 47	
22									51	60	58	47	
25 24					1				53	60	58 58	47	
25		1		:		l i			54	60	58	46	
ادير									54	60	57	15	
26									54	60	54	0	
27									57	60	53	0	
28 29 50									59	60	53	0	
50								-	59	60	53	0	
31		1		l	1		l		59	60	53	0	
		.			L .				59	-	53	_ 0	

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
Ootober	0	0	0	0	0
December	0	ŏ	ő	Ö	0
Calendar year 1936	3,940	58	0	10.8	7,810
January	0	00	00	0	0
March	0	ŏ	ŏ	ŏ	ŏ
April	S68	59	0	28.0	1,720
JuneJuly		60 60	59 53	60.0 57.9	3,570 3,560
August September	1,201	52 0	0	38.7 0	2,380 0
Water year 1936-37	5,664	60	0	15.5	11,230

Moore Creek near Arrowrock, Idaho

Location.- Staff gage, lat. 43°35', long. 115°59', in sec. 21, T. 3 N., R. 4 E., at bridge on Boise-Arrowrock highway, a quarter of a mile above mouth and 3 miles southwest of Arrowrock.

Drainage area .- 426 square miles.

Records available. October 1914 to September 1937 (prior to December 1915, discharge measurements only).

Average discharge. - 21 years (1916-37), 282 second-feet.

Extremes. Maximum discharge observed during year, 1,800 second-feet Apr. 14 (gage height, 4.04 feet); minimum, 14 second-feet Aug. 29, 30 (gage height, 0.28 foot).

1915-37: Maximum discharge observed, 4,550 second-feet Apr. 19, 1936; maximum gage height, 8.3 feet, former datum, Apr. 11, 1916; minimum discharge, 7.9 second-feet Aug. 13-15. 17, 18, 1924; minimum gage height, 0.22 foot, present datum, Aug. 16, 18, 19,

Remarks.- Records fair. No important diversions above station. Gage-height record furnished by Board of Control for Boise project. Four discharge measurements furnished by watermaster for Boise River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	37 39 36 34 35	48 41 28 37 39	34 40 32 32 49	52 32 34 46 62	66 66 68 71 58	98 113 125 115 107	500 1,300 955 578 550	635 730 838 955 1,040	347 347 308 289 272	92 94 80 73 70	26 25 25 25 25 25	16 18 17 18 21
6 7 8 9	37 40 40 37 49	43 43 33 28 33	52 66 87 73 49	75 46 39 59 76	66 89 85 83 76	121 121 138 156 167	525 455 432 455 478	955 875 765 765 730	254 238 222 238 289	64 54 54 54 49	25 25 25 23 21	21 23 22 21 21
11 12 13 14 15	40 41 41 40 43	39 37 35 37 41	25 19 19 32 34	83 76 76 76	78 78 83 83 85	208 238 238 500 367	478 500 730 1,500	698 605 635 665 698	289 238 222 193 193	49 47 45 42 47	20 20 20 19 18	21 21 21 21 21
16 17 18 19 20	45 46 48 47 46	46 56 62 51 53	54 58 60 64 58	75 78 71 71 68	75 73 66 68 65	500 525 478 347 308	1,300 1,080 995 915 995	605 605 605 698 578	193 238 208 193 208	42 40 38 37 35	17 17 17 17 16	21 19 20 20 21
21 22 23 24 25	52 62 56 60 85	56 43 48 43 37	60 66 66 73 73	62 70 73 73 76	60 70 75 82 80	272 254 222 222 222	1,080 915 800 665 698	525 500 500 478 550	208 180 156 138 117	33 31 33 33 31	16 16 16 16 16	24 25 25 24 25
26 27 28 29 30 31	83 89 59 58 48 39	35 26 23 24 29	66 64 68 45 40 47	76 76 71 73 68 62	94 89 92 -	272 327 327 367 388 410	875 1,040 915 800 665	635 550 478 455 432 388	127 119 109 101 92	33 33 28 28 26 26	15 15 15 14 14 15	27 29 29 29 29

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October	1,512 1,192 1,605	89 62 87	34 23 19	48.8 39.7 51.8	0.115 .093 .122	0.13 .10 .14	3,000 2,360 3,180
Calendar year 1936	119,647	4,100	19	327	.768	10.43	237,300
January February Harch April Hay June June July August September	2,058 2,124 8,253 24,674 20,171 6,326 1,440 594 670	83 94 525 1,500 1,040 347 94 26 29	32 58 98 432 388 92 25 14	66.4 75.9 266 822 651 211 46.5 19.2 22.3	.156 .178 .624 1.93 1.53 .495 .109 .045 .052	.18 .19 .72 2.15 1.76 .55 .13 .052	4,080 4,210 16,370 48,940 40,010 12,550 2,860 1,180 1,330
Water ye ar 1936-37	70,619	1,500	14	193	.453	6.16	140,100

Deer Flat Reservoir near Caldwell, Idaho

Location. - Staff gage at each end of reservoir, attached to outlet structure. One gage Is at lower embankment, lat. 43°35′, long. 116°45′, in SE½ sec.19, T. 3 N., R. 3 W., 5 miles south and 2 miles west of Caldwell; the other, at upper embankment, lat. 43° 34′, long. 116°39′, in NW½ sec. 36, T. 3 N., R. 3 W., 1 mile south and 4 miles west of Nampa.

Records available .- October 1917 to September 1937.

Extremes.- Maximum contents during year, 177,200 acre-feet April 20 (gage height, 30.00 feet); minimum, 7,732 acre-feet Oct. 23. 1917-37: Maximum contents, 178,900 acre-feet Apr. 27, 28, 1922, Apr. 24, 1932, (gage height, 30.18 feet), minimum, 5,390 acre-feet Oct. 22, 1924.

Remarks. - Reservoir has a capacity of 177,153 acre-feet between gage heights 0.0 and 30.0 feet. In addition to local drainage, water for storage is diverted from Boise River at diversion 8 miles below mouth of Moore Creek and carried to reservoir through main canal of Boise project. It is used for irrigation of lands of lower project. Gageheight record and table of storage capacity furnished by Board of Control for Boise project.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14,070	9,323	15,160	81,680	80,860		145,900			90,170	47,020	19,390
2 3	13,680 13,330	9,489 9,758	15,240	83,600	80,730		148,100			87,910	46,040	15,880
4	12,920	9,750	15,490 15,580	83,740 83,670	80,590 80,590		150,500			85,680 83.670	45,080 44,020	18,430
5	12,530	10,180	17,200	83,460	80,590		153,900			81,820	43,080	17,640
6	12,110	10,430	18,380	83,320			156,600			79,650	42,060	17,280
7 S	11,800	10,610	19,080	83,190			158,800			77,760	40,910	16,920
9	11,490 10,970	10,820	20,930	82,910 82,640			161,000			75,640 74,190	39,890 38,890	16,600 16,240
10	10,500	11,220	25,860	82,500			164,500			72,560	37,590	15,890
11	10,070	11,420	28,410	82,360	80,520	116,700	165,600	154,800	115,100	70,810	36,510	15,630
12	9,622	11,640	31,090	82,160	80,590	119,100	166,900	152,600	113,800	69,400	35,110	15,460
13	9,280	11,840	33,880	81,950			168,300			67,370	34,160	15,110
15	9,087 8,936	12,080	36,660 39,390	81,880 81,950			169,700 171,900			66,360 64,860	32,870 31,720	14,760 14,540
16	8,867	12.510	41,940	81,820	81.070	126.300	174,200	144.100	111.000	63,500	30.750	14,250
17	8,746	12,720	44,660	81,820			175,900			62,150	29,780	14,080
18	8,569	12,960	47,230	81,680			176,600			60,870	28,610	13,980
20	8,376 8,190	13,230 13,420	49,980 52,630	81,680 81.480			176,700			59,660 58,520	27,740 26,850	13,930 13,860
	-,											
21	8,016 7,873	13,710	55,100	81,270 81,270	84,010	125,200	177,000	136,200	107,100	57,210	25,980	13,680
23	7,732	13,960	57,690 60,260	81,270			176,400			56,040 54,990	25,560 24,580	13,380 13,090
24	7.763	14.130	62,390	81,270	85.950			136,500		54.060	23.890	12,800
25	8,093	14,280	65,480	81,200		128,600		136,700		53,200	23,260	12,630
26	8,252	14,450	68,000	81,140	87.700	130.900	173,800	136.700	99,830	52,230	22.680	12,430
27	8,415	14,620	69,910	81,000	88,970	133,500	172,800	135,900	97,980	51,330	21,920	12,160
28	8,604	14,760	72,170	81,000			171,700			50,370	21,310	11,860
30	8,871 8,995	14,900	74,580 77,100	81,000 81,000	-		170,500			49,540	20,610	11,550
31	9.153	15,090	79.240	80,930		143,100	169,600	131,800	92,170	48,880 47,890	20,180	11,060

Drains crossing Phyllis Canal to Boise River, Idaho

Phyllis Canal diverts from left bank of Boise River in sec. 24, T. 4 N., R. 1 W., 3½ miles southwest of Eagle. The canal flows west and south through Nampa and thence westward, passing though sec. 24, T. 3 N., R. 3 W., about 1½ miles north of upper embankment of Deer Flat Reservoir. Eight principal drains cross Phyllis Canal in this reach. Records of the flow of these drains at points from which the flow could be diverted, by gravity or pumping, into Phyllis Canal were collected during the winter season, Nov. 20, 1936, to Mar. 31, 1937.

A summary of the drain flow available for diversion during winters is useful, in conjunction with records for North and South Channels of Boise River near Eagle, to determine the feasibility of diverting water from these drains to supplement the storage impounded in Deer Flat Reservoir.

Mean monthly discharge in second-feet, winter season 1936-37

Name of drain	Nov. (20-30)	Dec.	Jan.	Feb.	Mar.
Fivemile	13.9	10.7	8.5	9.5	8.2
Tenmile	5.6	5.0	4.3	3.6	2.9
Purdam	7.5	6.8	6.0	6.1	5.7
Mason	7.5	6.9	6.5	5.0	4.5
Indian Creek	20.0	18.7	16.6	15.6	14.0
Elijah	17.0	15.3	14.5	15.1	15.3
Wilson	18.6	19.0	22.3	23.8	25.4
Wilson (additional)	9.7	10.1	9.6	8.0	7.4
Upper Embankment	8.4	8.4	8.9	9.5	10.3
Combined discharge	108.2	100.9	97.2	96.2	93.7
Run-off in acre- feet.	2,360	6,200	5,980	5,340	5,760

Total run-off in acre-feet, Nov. 20 to Mar. 31, 25,640

Note.- Determinations of mean monthly discharge were obtained from hydrographs drawn through periodical discharge measurements. All discharge measurements in this summary, together with others made for the same purpose, are included in the list of miscellaneous measurements at the end of this report.

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Malheur River near Drewsey, Oreg.

Location. - Water-stage recorder, lat. 43°41', long. 118°16', in SE½ sec. 3, T. 22 S., R. 35 E., half a mile above flow line of Warmsprings Reservoir and 10 miles southeast of Drewsev.

Drainage area .- 1,010 square miles.

Records available.- April to September 1923, June 1926 to September 1937. June to December 1920 and April to September 1921, at station 7 miles upstream.

Average discharge. - 11 years (1926-37), 114 second-feet.

Extremes. - Maximum discharge during year, 730 second-feet Apr. 16 (gage height, 4.44 feet); no flow Aug. 12, 15, Aug. 25 to Sept. 2. 1920-21, 1923, 1926-37: Maximum discharge, 3,800 second-feet Mar. 19, 1932 (gage height, 8.17 feet); no flow at times.

Remarks.- Records good except those for periods of ice effect, Dec. 4-25, 27, Dec. 29 to Mar. 9 (computed on basis of weather records, records for Warmsprings Reservoir, and three discharge measurements), and for period of missing gage-heights Aug. 30 to Sept. 7 (interpolated), which are poor. Several small diversions above station.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0dt. 1 t	o Mar. 9				Mar.	10 to	Sept.	30
1.0 0.4 1.2 2.4 1.4 7.5		21 42 07	0.9 1.0	.4		6. 5 17 36		103 202

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	3 7 4 2 2	31 33 36 26 30	41 39 46 41 32			113 114 116 117 116	230 592 343 249 249	276 314 334 343 350	106 89 71 63 62	16 14 12 11 10	2 2 2 2 2	0 1 1 1
5 7 8 9 10	3 3 4 13	41 42 39 35 26	26 27 30 33 38			115 114 113 113 110	249 282 214 214 374	330 291 258 230 210	63 68 47 36 34	10 10 9 8 8	1 1 1 1	1 1 1 1 1
11 12 13 14 15	17 18 18 14 10	26 33 38 40 40	42 47 49 48 46			117 158 235 444 298	307 247 264 455 592	202 200 177 148 136	30 27 27 26 24	7 6 5 5 5	1 0 1 0	1 1 1 1 1
16 17 18 19 20	10 10 13 16 15	40 46 42 41 43	42 39 40 42 46			267 258 258 186 142	705 615 480 466 444	146 148 144 152 156	27 34 68 64 81	4 3 3	1 2 2 1	1 1 1 1 1 1 1
21 22 25 24 25	17 18 16 18 18	42 40 38 40 44	50 54 54 51 50			125 118 134 112 125	476 494 396 354 347	138 129 125 131 134	118 129 105 84 64	2 2 2 3 3	1 1 1 0	55221
26 27 28 29 30 31	20 29 26 30 30 30	43 39 39 37 36	46 49 52 51 50 47			144 152 158 162 158 173	396 410 413 334 291	136 134 127 122 120 118	46 34 27 22 1e	3 8 5 4 3 2	00000	2 4 4 5

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October Hovember December	439 1,126 1,348	30 46 54	2 26 26	14.2 37.5 43.5	871 2,230 2,670
Calendar year 1936	50,380	1,500	0	138	99,920
January February Barch April May Jun Jun July August Beptomber	992 1,484 5,065 11,482 5,959 1,694 189 28 48	- 444 705 350 129 16 2 5	110 214 118 18 2 0	32 53 163 383 192 56.5 6.1 .9	1,970 2,940 10,050 22,770 11,820 3,360 375 56 95
Water year 1936-37	29,854	705	0	01.8	59,210

Warmsprings Reservoir near Riverside, Oreg.

Location. - Tape gage, lat. 43°35', long. 113°12', in SE4 sec. 8, T. 23 S., R. 37 E., at
Warmsprings Reservoir Dam, 4 miles above junction with South Fork of Malheur River and
4 miles northwest of Riverside. Zero of gage is 3,327.00 feet above mean sea level.

Records available .- January 1920 to September 1937.

Extremes. Maximum contents observed during year, 50,650 acre-feet May 3 (gage height, 39.46 feet); minimum, 290 acre-feet Sept. 30 (gage height, 3.05 feet). 1920-37: Maximum contents observed, 177,900 acre-feet May 19, 1922 (gage height, 75.75 feet); no storage Sept. 18 to Nov. 1, 1929, Aug. 28 to some time in November, 1935.

Remarks. - Records excellent. In 1919 reservoir was completed by Warmsprings Irrigation
District for irrigation of its lands on both sides of Malheur River, extending from
mouth of canyon above Vale to Ontario In 1926 a half interest in reservoir was purchased by the Government for the Vale project of Bureau of Reclamation which embraces
lands between Namorf and mouth of Willow Creek just below Vale, mainly on north side
of Malheur River. In 1930 capacity of reservoir was increased by flashboards from
170,000 acre-feet at gage height 74.0 feet (crest of spillway) to 192,500 acre-feet at
gage height 79.0 feet (top of flashboards).

Monthly gage height and contents, water year October 1936 to September 1937

Date	Gage height (feet)	Contents (acre-feet)	Changes in contents during month (acre-feet)
Sept. 30	17.69	10,030	-
Oct. 31	14.65	6,650	-3,380
Nov. 30	16.53	8,636	+1,986
Dec. 31	18.73	11,250	+2,644
Jan. 31	20.31	13,230	+1,950
Feb. 28	22.40	16,160	+2,930
Mar. 31	-	*26,200	+10,040
Apr. 30	39.05	49.620	+23.420
May 31	34.67	38,680	-10,940
June 30	28.21	25,420	-13,260
July 31		*11,020	-14.400
Aug. 31	_	* 2,848	- 8,172
Sept. 30	3.05	290	- 2,558
The year			- 9,740

«Contents computed on basis of gage heights for preceding and following days; gage not read because of wind.

Malheur River below Warmsprings Reservoir, near Riverside, Oreg.

Location. - Hook gage, lat. 43°34', long. 118°12', in SW\(\frac{1}{4}\) sec. 17, T. 23 S., R. 37 E., 1

MILE below Warmsprings Dam, 3 miles above South Fork of Malheur River, and 4 miles northwest of Riverside.

Prainage area. - 1,100 square miles.

Records available. - December 1914 to July 1917, March 1919 to September 1937. January
1908 to March 1907, December 1908 to September 1910 at Riverside, 4 miles downstream,
in reports of U. S. Geological Survey; October 1910 to November 1914, In reports of

in reports of U. S. Geological Survey; October 1910 to November 1914, in reports of State engineer.

Average discharge. 25 years (1909-16, 1919-37), 163 second-feet.

Extremes. Maximum discharge observed during year ending Sept. 30, 1936, 735 second-feet

July 4-8 (gage height, 5.20 feet); practically no flow Oct. 1 to Apr. 25, June 11.

Maximum discharge observed during year ending Sept. 30, 1937, 475 second-feet May 17-19 (gage height, 4.76 feet); no flow Nov. 8 to Apr. 22, Apr. 23-26.

1906-7, 1908-17, 1919-37: Maximum discharge observed, 5,490 second-feet Mar. 2, 1910; practically no flow at times.

Remarks. Records good. Several small diversions for irrigation above station. Flow completely regulated since November 1919 by operation of gates in Warmsprings Dam.

Rating tables, water years 1935-37 (gage height, in feet and discharge, in second-feet)

Apr. 25 to June 11, 1936	June	12,	1936	to	Sept.	30,	1937
2.8 2.0			2.8		1.0		
3.0 7.0			3.0		5.3		
3.2 14			3.2		13		
3.4 28			3.4		26		
3.6 51			3.6		48		
3.8 S9			3.8		S2		
4.2 205			4.0		130		
4.6 390			4.3		225		
5.0 640			4.6		560		
			4.9		35		
			5.2		735		

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5							0000	89 121 121 132 188	475 315 229 126 61	665 665 665 665 735	167 167 161 140 130	237 237 237 217 217
6 7 8 9 10							0 0 0 0	263 315 315 315 365	10 10 10 10 10	735 735 735 700 665	98 98 98 98 110	170 170 176 193 185
11 12 13 14 15			,				00000	365 390 505 570 570	4.5 4.0 98 98 108	568 505 475 360 205	150 150 150 150 150	185 253 253 237 193
16 17 18 19 20							0000	570 640 640 640	158 245 360 415 505	115 115 115 115 115	150 150 150 155 167	173 128 128 120 98
21 22 23 24 25							0 0 0 0 4	640 640 570 570 570	535 535 535 535 600	142 257 261 292 283	167 173 189 189 189	98 98 91 72 72
26 27 28 29 30 31							25 25 25 25 25 35	570 570 570 570 570 570	600 600 600 600 665	257 249 229 213 167 167	209 237 257 257 257 257	72 72 80 108 108

Discharge, in second-feet, of Malheur River below Warmsprings Reservoir, near Riverside, Oreg. 1935-57--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	108 108 108 108 108	24 24 24 24 7.0					0 0 0 0	150 150 197 335 335	335 335 335 335 335 335	445 415 296 193 185	2.5 2.5 2.5 2.5 2.5	115 94 82 80 52
6 7 8 9 10	108 108 108 108 108	3.0 .5 0 0					0 0 0 0	335 360 388 388 388	415 415 388 388 360	241 257 229 229 229	55 98 67 67 80	52 52 52 50 43
11 12 13 14 15	108 98 78 78 44	0 0 0 0					0 0 0 0	415 388 388 388 445	360 335 283 278 245	253 283 283 217 205	98 120 120 125 155	43 43 43 43 43
16 17 18 19 20	20 20 20 20 20	0 0 0 0					0 0 0 0	445 445 475 475 388	201 150 142 135 120	217 261 245 241 209	161 170 161 138 125	43 43 40 34 21
21 22 23 24 25	20 29 3 3 33 3 3	0000					0 37 47 0	310 274 274 274 292	120 120 148 170 182	155 155 155 155 155	130 155 164 182 167	12 14 29 29 29
26 27 28 29 30 31	30 24 24 24 24 24	0 0 0 0 0 -					11 60 78 100 112	335 335 335 310 335 335	229 249 257 360 415	150 130 130 120 120 100 92	161 161 161 161 155 132	29 29 29 23 1.0

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1935 November. December.	0 0 0	0	0 0 0	0 0 0	0 0 0
Calendar year 1935	28,684	472	0	78.4	56,900
January 1936 February Harch April Hay June July August September	0 0 139 14,164 9,056,5 12,170 5,090 4,631	0 0 35 640 665 735 237 237	0 0 0 89 4.0 115 98 72	0 0 0 4.6 457 302 393 164 154	28,090 17,960 24,140 10,100 9,190
Water year 1935-36	45,250.5	735	0	124	89,760
October 1936 November. December.	1,884 106.5 0	108 24 0	20 0 0	60.8 3.55 0	3,740 211 0
Calendar year 1936	47,241.0	735	0	129	93,710
Jamary 1937 February Harch April Hay June July August September	0 0 445 10,687 8,140 6,630 3,481.5 1,292.0	0 0 112 475 415 445 182 115	0 0 0 150 120 92 2.5 1.0	0 0 0 14.8 345 271 214 112 43.1	0 0 0 883 21,200 16,150 13,150 6,910 2,560
Water year 1936-37	32,666.0	475	0	89.5	64,800

Note .- The above records for water year 1935-36 supersede those published in Water-Supply Paper 813.

Malheur River near Hope, Oreg.

Location. - Water-stage recorder, lat. 43°57', long. 117°29', in SW2 sec. 5, T. 19 S., R. 43 E., half a mile above intake of Vines Canal and 62 miles west of Hope.

Drainage area .- 3,030 square miles.

Records available. - May 1919 to September 1937 (incomplete prior to May 1926).

Extremes. Maximum discharge observed during year, 367 second-feet July 13 (gage height, 2.14 feet); minimum, about 14 second-feet Nov. 28, Dec. 1 (gage height, 0.46 foot).
1919-37: Maximum discharge, 8,100 second-feet Feb. 5, 1925, from rating curve extended above 3,000 second-feet; minimum, 3.5 second-feet Sept. 2, 1919 (gage height, 0.02 foot).

The maximum known floods occurred in March 1894 and in 1910.

Remarks: Records fair except those for periods of missing gage-heights Oct. 1-4, Oct. 25 to Nov. 6, Dec. 24-28, Mar. 15-23, May 19, June 25, 26, Aug. 23, and those for period of ice effect, Jan. 2 to Mar. 3, which were computed on basis of weather records at Harper and records at stations upstream and are poor. No large diversions upstream except that at Namorf by the Vale-Oregon Canal, completed by the Bureau of Reclamation in 1930. Flow regulated to a large extent by storage in Warmsprings Reservoir since November 1919 and in Agency Valley Reservoir since December 1935.

Rating table, water year 1936-37 except for periods of ice-effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 22 to Sept. 22)

0.4	12	1.4	133
٠6	21	1.6	
-8	36	1.8	
1.0	57	2.0	357
1.2	89	2.2	455

Oct.	HOT.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
42 42 42	36 36 34	30 34 43	27 26 27	26 27 28	49 55 58	97 265 282	133 136 136	123 93 114	215 200 187	128 123 75	119 101 95 93
45	30	38	31	27	67	187	141	99	93	51	93 99
44 52 52 52 52	28 25 24 24 24	43 42 39 38 41	32 34 36 38 40	26 25 24 25 27	70 67 63 63 60	158 150 147 144 141	144 144 150 155 167	144 158 177 171 164	101 144 155 167 261	46 44 42 55 64	97 75 71 75 68
55 60 68 73 71	25 21 20 22 21	30 27 34 31 41	38 34 29 26 24	30 31 30 29 30	63 70 82 99 196	141 136 133 131 126	177 190 200 200 200	133 180 180 105 158	222 207 367 286 245	85 99 97 103 121	65 60 61 57 55
67 63 58 52 46	21 21 21 21 21 21	27 39 40 30 31	21 17 15 15 16	30 31 32 31 31	190 185 182 160 132	128 128 126 116 91	233 253 278 237 312	153 161 121 76 76	222 207 278 200 167	144 158 190 167 147	55 51 45 45 50
43 41 40 39 38	22 22 22 23 27	45 40 45 40 35	16 17 18 19 20	30 31 32 33 34	110 102 85 71 70	63 53 49 43 85	290 204 136 139 136	64 55 49 44 48	155 144 133 128 123	131 126 136 144 153	52 51 47 40 37
38 37 37 37 36 36	35 31 20 26 32	32 30 37 40 33 40	21 22 22 23 24 26	35 38 43 	67 64 65 65 68 78	111 114 116 123 133	144 177 164 155 101 139	120 107 144 128 161	128 144 150 139 144 126	153 144 133 136 139 131	38 38 37 34 34
	42 42 42 41 45 52 52 52 55 56 68 68 67 63 52 46 43 41 40 49 39 38 37 37 37 37 37	42 36 42 36 42 34 41 33 45 30 44 1 28 52 25 52 24 52 24 52 24 52 24 52 24 52 24 52 24 52 24 52 24 52 24 52 24 52 24 52 24 52 24 52 24 52 25 68 20 73 22 71 21 67 21 68 21 58 21 59 23 59 23 59 23 57 31 57 20 57 31 57 20 57 37 36 58 35 57 36 58 35	42 36 30 42 34 43 443 441 33 38 45 30 38 45 52 24 39 52 24 38 52 24 31 50 56 21 57 56 58 21 40 52 21 51 43 22 40 40 22 45 29 25 40 58 27 55 58 35 37 20 37 26 40 37 37 26 40 37 37 26 40 37 37 26 40 37 37 26 40 37 37 26 40 37 37 36 36 32 35	42 36 30 27 42 36 34 26 42 36 34 26 42 36 34 27 41 33 38 27 41 33 38 29 45 30 38 31 44 28 45 32 52 24 39 36 52 24 39 36 52 24 41 40 55 25 50 38 60 21 27 34 68 20 34 29 73 22 31 26 71 21 41 24 67 21 27 21 65 21 39 17 58 21 30 15 52 21 30 15 52 21 30 16 43 22 46 16 41 22 40 17 40 22 45 18 39 25 40 19 38 27 35 20 37 31 30 22 37 31 30 22 37 31 30 22 37 31 30 22 37 31 30 22 37 31 30 22 37 31 30 22 37 26 40 25 37 26 40 25 37 26 40 25 37 26 40 25 37 26 40 25 37 26 40 25 37 26 40 25 37 26 40 25 37 26 40 25 37 26 40 25	42 36 30 27 26 42 36 34 26 27 42 36 34 43 26 27 42 36 43 27 42 37 41 33 38 29 29 45 30 38 31 29 46 30 38 31 22 52 26 42 34 25 52 24 39 36 24 52 24 39 36 26 52 24 31 40 25 60 21 27 34 31 68 20 54 29 30 68 20 54 29 30 67 21 27 34 31 68 20 54 29 30 67 21 27 35 31 21 41 24 30 67 21 39 17 51 58 21 39 17 51 58 21 30 15 52 52 21 30 15 51 46 21 51 16 31 40 22 45 16 30 41 22 40 17 31 40 22 45 16 30 41 22 40 17 31 40 22 45 18 32 39 25 40 19 55 38 37 36 38 39 38 36 52 21 35 39 25 40 19 55 39 25 36 40 19 55 39 37 31 50 22 38 37 31 50 22 45 37 37 31 50 22 45 37 20 37 20 37 37 26 40 25 - 37 37 26 40 25 - 37 37 26 37 26 40 25 - 37 37 26 37 26 40 25 - 37 37 26 37 26 40 25 - 37 37 26 37 26 40 25 - 37 37 26 37 26 37 22 45 36 32 35 35 24 - 3	42 36 30 27 26 49 42 36 34 26 27 55 42 34 43 27 28 58 41 33 38 27 29 67 44 53 38 31 27 67 44 42 8 45 32 26 70 52 24 39 36 24 67 52 24 39 36 26 67 52 24 38 38 26 63 52 24 41 40 27 60 55 25 50 38 30 63 60 21 27 34 31 70 68 20 34 29 30 82 73 22 31 26 29 99 71 21 41 24 30 196 67 21 27 21 30 190 67 21 27 21 30 190 67 21 27 21 30 190 67 21 27 34 31 70 68 20 34 29 30 82 68 20 34 29 30 82 68 20 34 39 17 31 185 58 21 40 15 32 182 58 21 40 17 31 102 40 22 45 18 32 85 39 25 40 19 35 71 38 35 32 21 35 67 37 31 30 22 38 64 37 30 26 40 25 - 68	42 36 30 27 26 49 97 42 36 34 26 27 55 265 42 36 43 27 28 58 282 41 33 38 29 29 67 283 45 25 42 34 25 67 187 44 28 45 32 26 67 187 52 24 39 36 24 63 147 52 24 38 38 26 65 144 55 22 4 41 40 27 66 141 55 22 31 26 29 99 151 66 21 27 34 31 70 136 68 20 34 29 30 82 153 73 22 31 26 29 99 151 71 21 41 24 30 196 67 21 27 21 30 196 67 21 27 21 30 196 67 21 39 17 31 185 68 21 40 15 32 182 67 21 39 17 31 185 68 21 40 15 32 182 67 21 39 17 31 185 68 21 40 15 32 182 67 21 39 17 31 186 68 21 40 15 32 182 67 21 39 17 31 186 68 21 40 15 32 182 69 99 153 79 25 182 126 67 21 50 16 31 160 116 67 21 50 28 40 19 50 10 10 128 58 21 40 15 32 182 59 19 17 31 195 58 21 40 15 32 182 59 21 30 15 31 160 116 67 21 50 28 40 19 55 71 45 58 27 56 20 34 70 85 58 56 52 21 35 35 67 111 57 37 31 50 22 38 64 114 57 20 37 22 45 65 116 57 20 37 22 45 65 116 57 20 37 22 45 66 116 57 20 37 22 45 65 116 57 20 37 20 37 22 45 65 116 57 20 37 20 37 22 45 65 116 57 20 37 20 37 22 45 65 116 57 20 37 20 37 22 45 65 116 57 26 40 25 - 66 125 56 32 35 24 - 68	42 36 30 27 26 49 97 133 42 36 34 26 27 55 265 136 42 36 43 43 26 27 28 58 282 136 41 33 38 38 29 29 67 253 131 45 20 25 42 34 25 67 187 141 44 28 45 32 26 70 158 144 52 25 42 34 25 67 150 144 52 24 39 36 26 67 150 144 52 24 38 38 26 67 150 144 55 24 41 40 27 60 141 167 55 25 30 38 30 65 141 177 60 21 27 34 31 70 136 190 60 21 27 34 31 70 136 190 61 21 27 34 31 70 136 190 63 22 31 26 29 99 131 200 67 21 27 34 30 196 126 200 67 21 27 21 30 190 128 233 65 21 39 17 31 185 128 253 68 21 40 15 32 182 126 278 68 21 40 15 32 182 29 30 67 21 27 31 16 31 162 27 68 22 45 16 30 110 65 290 67 21 27 31 16 31 132 91 312 68 21 40 15 32 182 126 278 68 21 40 17 31 102 53 204 67 21 27 21 30 190 128 233 68 21 40 17 31 102 53 204 67 21 27 31 36 31 162 178 278 282 68 21 40 17 31 102 53 204 69 25 27 56 20 34 70 85 136 58 27 56 20 34 70 85 136 58 35 32 21 35 67 111 144 57 26 40 25 45 16 16 41 107 57 20 37 22 45 65 116 164 57 21 37 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164 57 20 37 22 45 65 116 164	42 36 30 27 26 49 97 133 123 42 36 34 26 27 55 265 136 95 42 33 43 27 28 58 282 136 134 41 33 38 29 29 67 263 131 76 45 30 38 31 27 67 187 141 99 44 28 45 32 26 70 158 144 158 52 24 39 36 24 63 147 150 144 158 52 24 38 38 25 63 144 155 171 52 24 41 40 27 66 0 141 167 164 55 25 25 30 38 30 65 141 177 167 68 20 21 27 34 31 70 136 190 180 68 20 54 29 30 62 135 200 180 67 21 27 21 30 190 128 233 165 67 21 39 17 31 165 128 253 161 58 21 40 15 32 185 128 253 161 58 21 40 15 32 185 190 180 67 21 27 21 30 190 128 233 153 68 21 40 15 32 185 190 180 67 21 27 31 165 32 182 29 91 31 200 105 71 22 31 26 29 99 131 200 105 73 22 31 26 29 99 131 200 105 74 21 27 21 30 190 128 233 153 68 21 40 15 32 182 126 278 121 58 21 30 15 31 166 31 166 116 257 76 46 21 31 16 31 160 166 277 76 47 28 28 28 49 17 31 190 63 290 64 48 29 40 17 31 190 65 290 64 49 39 25 40 19 35 71 43 139 44 39 25 40 19 35 71 43 139 44 37 31 50 22 45 18 39 86 116 164 144 177 107 37 31 50 22 38 64 114 177 107 37 31 50 22 38 64 114 177 107 37 31 50 22 38 64 114 177 107 37 37 31 50 22 38 64 114 177 107 37 20 37 32 23 55 52 21 55 67 111 144 120 37 20 37 37 21 55 67 111 144 177 107 37 26 40 25 - 65 125 155 128	42	42 36 30 27 26 49 97 133 123 215 128 42 36 34 26 27 85 5265 136 93 200 123 42 36 44 28 45 27 28 58 282 136 114 187 75 41 33 38 29 29 67 253 131 76 119 61 45 30 38 31 27 67 187 141 99 93 61 44 28 45 32 26 70 158 144 144 101 46 52 25 42 34 25 67 150 144 155 144 45 52 24 39 36 24 63 147 150 177 155 42 52 24 39 36 25 65 141 167 164 261 65 24 41 40 27 60 141 167 164 261 66 21 27 34 31 70 136 190 180 207 99 68 20 54 29 50 82 135 200 180 367 97 73 22 31 26 29 99 131 200 160 207 99 68 20 54 29 99 131 200 160 207 99 73 22 31 26 29 99 131 200 160 266 103 71 21 41 24 50 196 126 200 168 245 121 67 21 27 21 50 190 128 233 163 222 144 65 21 39 17 31 165 128 253 161 207 158 68 21 40 16 52 182 126 27 79 68 21 30 16 31 160 116 27 70 200 167 68 21 39 17 31 165 128 253 161 207 158 68 21 40 16 52 182 126 27 79 200 167 68 21 50 16 51 16 51 16 51 132 160 160 27 69 21 27 21 50 190 128 233 163 222 144 65 21 30 16 31 160 116 27 79 200 167 68 21 30 16 31 160 116 27 79 200 167 68 21 50 16 31 160 116 27 79 200 167 68 21 50 16 31 160 116 27 79 200 167 68 21 50 16 31 160 116 27 79 200 167 68 21 50 16 31 160 116 27 79 200 167 69 21 50 16 31 160 116 27 79 200 167 60 21 51 16 31 160 116 27 79 200 167 60 21 51 16 31 160 116 27 79 200 167 60 21 51 16 31 160 116 27 79 200 167 60 21 51 16 31 160 116 27 79 200 167 60 21 51 16 31 160 116 27 79 200 167 60 21 51 16 31 160 116 27 79 200 167 60 21 51 16 31 160 116 27 10 10 10 12 10 10 10 10 10 10 10 10 10 10 10 10 10

	Month			Second foot-da		Maximum	Vinimus	Mean	Run-off in acre-feet
October					499 766 133	73 36 45	36 20 27	48.4 25.5 36.5	2,970 1,520 2,250
Oalendar year	1936,		· · · · · · ·	60,	329	5,420	-	165	119,700
January February March April May July August September				2, 3, 5, 3,	783 845 823 970 502 552 557 526 845	40 43 196 282 312 180 367 190	15 24 49 43 101 44 93 42 34	25.3 30.2 91.1 132 177 119 179 114 61.5	1,550 1,680 5,600 7,870 10,910 7,100 11,020 6,990 3,660
Water year 193	6-37	• • • • • • • • • •	• • • • • • •	31,	e31	367	15	87.2	63,120

North Fork of Malheur River above Agency Valley Reservoir, near Beulah, Oreg.

Location. - Water-stage recorder, lat. 43°58', long. ll8°11', in sec. 33, T. 18 S., R. 37
E., at M. W. Scott's ranch, about 3 miles above Warm Springs Creek and 4 miles northwest of Agency Valley Dam at Beulah.

Records available .- January to September 1914, June 1936 to September 1937.

Extremes. Maximum discharge during year, 382 second-feet Apr. 15 (gage height, 2.62 feet); minimum, 20 second-feet Aug. 21 (gage height, 0.37 foot).
1914, 1936-37: Maximum discharge observed, 868 second-feet Apr. 15, 1914 (gage height, 4.8 feet, former datum); minimum, 20 second-feet Aug. 8, 9, 1936, Aug. 21,

Remarks. - Records good except those for periods of ice effect, Nov. 15 to Dec. 22, Dec. 22-30, Jan. 4 to Feb. 26, and of missing gage-heights, Apr. 24-26, 28, May 1, 2, July 11, 18, which were computed from change in contents of Agency Valley Reservoir and are fair. A few small diversions above station; no regulation.

Rating tables, water year 1936-57 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1	to Feb.	26		Feb.	27 to	Sept.	3Q	
0.4			0.4	22 37	1.0		1.9	226 290
.8	54		.8	57	1-6	167	2.6	

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	29 29 29 28 26	37 27 27 40 46		35 29 41		43 44 44 44 45	205 183 136 124 123	185 220 279 301 290	134 127 123 121 117	55 55 52 46 44	38 34 34 33 31	31 31 30 30 32
6 7 8 9 10	28 25 27 29 31	40 29 28 35 52				52 54 56 57 58	133 110 116 211 193	268 258 234 226 220	112 107 102 102 102	42 42 42 41 39	31 31 31 31 32	31 31 31 31 31 30
11 12 13 14 15	30 30 31 32 33	40 37 37 40	37		42	71 82 103 97 99	157 150 218 312 358	209 197 203 228 243	100 95 89 85 89	38 37 37 38 38	32 31 32 31 31	29 29 29 28 28
16 17 18 19 20	34 34 34 34 34			42		104 111 100 68 80	312 239 224 216 236	247 247 258 258 245	94 95 56 91 102	35 35 36 36 36	31 30 30 29 26	28 29 29 30 32
21 22 23 24 25	35 35 35 35 35	37	42	-		67 85 65 72 71	265 232 201 200 197	230 224 220 213 213	94 85 81 74 68	35 34 34 35 35	23 22 23 24 26	33 31 30 30 30
26 27 28 29 50 51	35 35 35 35 35 38		39		66 45 -	84 94 98 97 110	250 268 220 191 189	201 187 183 176 164 145	65 62 59 55 56	60 36 34 34 34 34	26 28 28 28 31	51 31 31 31 50

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	998 1,107 1,161	38 52 -	26 27 -	32.2 36.9 37.5	1,980 2,200 2,300
Calendar year					
January Pebruary Karch April Bay June July August Beptember	1,203 2,365 6,152 6,972 2,772	111 358 301 134 60 38 33	- 43 110 145 55 34 22 28	41.3 43.0 76.3 205 225 92.4 39.6 29.6 30.2	2,540 2,590 4,690 12,200 13,830 5,500 2,440 1,820 1,800
Water year 1936-37	27,066	358	22	74.2	53,690

Agency Valley Reservoir at Beulah, Oreg.

Location.- Pressure gage with mercury column, lat. 43°55', long. 118°09', in SW2 sec. 15, T. 19 S., R. 37 E., at dam on North Fork of Malheur River, a quarter of a mile northwest of Beulah. Gage readings are elevation above mean sea level.

Drainage area .- 420 square miles.

Records available .- December 1935, when storage began, to September 1937.

Extremes. Maximum contents observed during year, 41,140 acre-feet June 21, 22, June 28 to July 2 (gage height, 3,329.10 feet); minimum, 3,793 acre-feet Sept. 30 (gage height, 3,290.10 feet).

1935-37: Maximum contents observed, that of June 21, 22, June 26 to July 2, 1937; no storage prior to Dec. 21, 1935, when gates were first closed.

marks.- Records excellent. Contents for Sept. 30, Nov. 30, 1936, interpolated Agency Valley Dam was constructed in 1935 by Bureau of Reclamation; its capacity above elevation 3,283.21 feet (bottom of outlet tunnel) is 59,920 acre-feet at elevation 3,340 feet (top of spillway gates), or 32,220 acre-feet at elevation 3,323 feet (spillway crest). Diversions for irrigation above station. Gage-height record and capacity tabl furnished by Bureau of Reclamation. Remarks .- Records excellent.

Monthly elevation and contents, water year October 1936 to September 1937

Date		Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.	30	-	14,780	-
Oct.	31	3,309.0	15 ,9 60	+1,180
Nov.	30	-	18,120	+2,160
Dec.	31	3,313.57	20,640	+2,520
Jan.	31	3,315.70	23,030	+2,390
Feb.	28	3,318.10	25 ,9 00	+2,870
Mar.	31	3,322.05	30,940	+5,040
Apr.	30	3,328.70	40,520	+9,580
May	31	3,328.70	40,520	. 0
June	30	3,329.10	41,140	+ 620
July	31	3,316.75	24,270	- 16,870
Aug.	31	3,302.50	10,650	- 13,620
Sept.	30	3,290.10	3,793	-6,857
The	year			- 10,987

North Fork of Malheur River at Beulah, Oreg.

Location.- Staff gage, lat. 43°54', long. 118°09', in NE1 sec. 22, T. 19 S., R. 37 E., at Beulah, a quarter of a mile below Agency Valley Dam and 12 miles northwest of Juntura.

Drainage area .- 420 square miles.

Records available. June 1926 to September 1937. March 1909 to June 1912, November 1913 to July 1914, at station 6 miles downstream.

Extremes. - Maximum discharge observed during year, 401 second-feet July 9, 10, 16, 17 (gage height, 3.50 feet); practically no flow at times, October to April. 1909-12, 1918-14, 1926-37: Maximum discharge, 5,910 second-feet Mar. 20, 1910; minimum prior to construction of dam, 5 second-feet Dec. 28, 1910, Jan. 26, 27, 1911.

Remarks.- Records good, Discharge for Oct. 16 to Apr. 21 when reservoir gates were closed, computed on basis of two estimates of discharge made by field engineer. Flow regulated by Agency Valley Reservoir of Bureau of Reclamation. Small diversions for irrigation above station; practically entire summer flow is diverted below station and above Juntura. Gage-height record furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Her.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	19 19 19 19							215 215 215 215 243 243	124 112 106 106 96	38 38 142 243 271	257 243 243 243 243 243	215 188 188 188 188
6 7 8 9	19 19 19 19							243 243 243 243 243 243	96 84 79 79 79	285 299 299 341 401	243 229 229 229 243	188 188 175 162 118
11 12 13 14 15	19 19 19 19		,				0.2	243 243 215 229 201	96 90 90 84 79	371 386 386 386 386 386	229 229 243 271 271	96 96 101 101 101
16 17 18 19 20								215 229 229 229 229	79 79 64 40 40	401 386 386 371 341	271 271 271 271 271 285	101 118 130 162 162
21 22 23 24 25	.1						79 188 215 215	215 188 188 188 188	55 79 74 64 64	313 313 313 313 313	285 285 285 285 285 285	162 149 162 142 142
26 27 28 29 30 31							215 215 215 215 215 215	188 168 136 162 142 112	59 59 54 47 47	313 299 285 271 271 257	285 285 285 285 285 257 243	142 136 106 84 69

Nonth	Second- foot-days	Maximum	Minimum	Kean	Run-off in
October November December	 3.0	19 - -	=	8.99 .1 .1	553 6 6
Oalendar year 1936	 18,027.0	226	0	49.3	35,750
January. February. Haroh. April Hay Jun Jun Jun Augus September.	 5.6 6.0 1,776.2 6,483 2,304 9,418 8,079	215 243 124 401 285 215	- - - 112 40 38 229 69	.1 .2 .2 .59.2 209 76.8 304 261 142	6 11 12 3,520 12,860 4,570 18,680 16,020 8,450
Water year 1936-37	 32,619.6	401	-	69.4	64,690

South Fork of Payette River near Garden Valley, Idaho

Location.— Water-stage recorder, lat. 44°04', long. 115°56', in sec. 1, T. 8 N., R. 4 E., at Garden Valley ranger station, 300 feet above mouth of Station Creek, 2.7 miles southeast of Garden Valley, and 5.9 miles above mouth of Middle Fork of Payette River. Drainage area.— 779 square miles.

Records available.— May 1921 to September 1937.

Average discharge.— 13 years (1924-37), 1,130 second-feet.

Extremes.— Maximum discharge during year, 3,200 second-feet May 25 (gage height, 4.21 feet); minimum, 160 second-feet Dec. 21 (gage height, 1.03 feet), from rating curve extended below 280 second-feet; minimum daily discharge, 234 second-feet Dec. 29. 1921-37: Maximum discharge observed, 10,600 second-feet May 26, 1928 (gage height, 8.0 feet); minimum, 75 second-feet Dec. 15, 1935, Jan. 26, 1936 (gage height, 0.70 foot), from rating curve extended below 280 second-feet; minimum daily discharge, 217 second-feet Jan. 26, 1936.

Remarks.— Records excellent except those for periods of ice effect, Nov. 28 to Dec. 3, Dec. 11, 12, Jan. 2, 7-29, and of missing gage-heights, Aug. 1-5, which were computed on basis of one discharge measurement, weather records, and records for other stations in Payette River Basin and are good. Practically no diversions above station. Since Nov. 2, 1930, flow has been regulated by operation of grates in Deadwood Dam, on Deadwood River. Slight regulation by operation of Grimes Pass power plant.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.00	150	2.20	845	3.40	2.100
1.20	225		1.010	3.60	2,360
1.40			1,195	3.50	2,630
1.60	430		1,390	4.00	2,910
1.80	555		1,610	4.20	3,200
2.00	690	3.20	1 850		•,

Day	Oct.	Nov.	Dec.	Jan.	Peb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2	397	419	430	300	348	380	516	1,100	1,970	1,070	880	1,100
2	436	375	440	270	380	408	64S	1,390	1,910	1,010	880	1,100
5	430	295	450	285	375	392	536	1,790	2,100	950	880	1,050 861
4	430	442	454	305	386	380	490	2,100	2,230	925 893	900 900	885
5	430	503	460	348	342	386	466	2,360	2,040	099	900	000
6	436	490	496	353	353	386	460	2,360	1,850	909	909	813
7	424	472	529	1)	397	414	436	2,300	1,730	861	917	773
8	414	448	510]]	375	419	436	2,160	1,670	805	909	594
9	414	454	503	11	360	430	454	2,230	1,850	781	917 917	634 813
10	750	466	466	280	386	436	466	2,300	1,970	720	9T4	819
111	765	478	400		364	466	472	2.160	1,850	698	950	797
11 12	758	472	400		386	503	478	2,040	1,670	712	984	781
13	735	472	436	11	392	490	634	2,100	1,610	909	1,070	705
14	484	466	466	IJ	375	516	1,390	2,420	1,500	1,090	1,150	705
15	478	478	496)	397	529	1,610	2,560	1,500	1,060	1,100	698
16	478	478	522		364	600	1,290	2.560	1,560	805	1,150	728
17	478	478	503		392	562	1,050	2,700	1,670	705	1,200	805
18	472	472	496	11 1	370	542	959	2,700	1,560	690	1,200	813
19	478	466	490		370	478	917	2,980	1,440	720	1,200	869
50	472	460	436		364	466	925	2,700	1,670	837	1,240	901
21	472	460	364	370	315	402	1,060	2,560	1,970	829	1,240	805
22	419	448	342		375	375	1,010	2,630	2,040	893	1,240	698
25	402	442	336	11 1	392	408	901	2,980	1,850	959	1,240	712
24	402	436	342	11 1	386	380	805	2,910	1,560	950	1,240	781
25	408	436	342		380	392	821	2,980	1,390	1,010	1,240	789
26	408	442	326	H	386	397	1,090	2,980	1,290	993	1,240	781
27	408	430	336	11 1	3 80	436	1,440	2,980	1,200	853	1,290	728
28	397	400	315		358	436	1,340	3,120	1,150	976	1,340	720
29	402	370	234	/	-	436	1,150	2,980	1,150	1,020	1,240	690
30	402	400	270	380	-	442	1,020	2,630	1,150	993	1,240	634
31	408	-	320	424		466	•	2,230		877	1,200	-
										T -		

Nonth	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	14,687 13,348 12,910	765 503 529	397 295 234	474 445 416	29,130 26,480 25,610
Calendar year 1936	451,981	6,250	217	1,235	896,600
January. February Barch. April. Bay. June. July. August. Beptember.	10,455 10,468 13,753 25,270 76,060 50,100 27,503 33,983 23,763	424 397 600 1,610 3,120 2,230 1,090 1,340 1,100	315 375 436 1,100 1,150 690 880 594	337 374 444 842 2,454 1,670 887 1,096	20,740 20,760 27,280 50,120 150,900 99,370 54,550 67,400 47,130
Water year 1936-37	312,300	3,120	234	856	619,500

South Fork of Payette River near Banks, Idaho

Location.— Water-stage recorder, lat. 44°05'30", long. 116°06', in sec. 28, T. 9 N.,

R. 3 E., l mile above junction with North Fork of Payette River and 1½ miles northeast of Banks. Zero of gage is 2,812.00 feet above mean sea level.

Drainage area.— 1,200 square miles.

Records available.— August 1921 to September 1937.

Average discharge.— 16 years, 1,510 second-feet.

Extremes.— Maximum discharge during year, 4,380 second-feet May 28 (gage height, 5.32

Teet); minimum, 314 second-feet Dec. 30 (gage height, 0.11 foot).

1921—37: Maximum discharge, 13,800 second-feet May 17, 1927 (gage height, 10.6
feet, from high-water mark); minimum, 225 second-feet Dec. 16, 1935, Jan. 28, 1936,
from rating curve extended below 400 second-feet.

Remarks.— Records good. Discharge for periods of ice effect, Nov. 28 to Dec. 6, Jan. 2

To Feb. 27, and of incomplete gage-height graph, Apr. 1, 23, June 22, computed on
bais of two discharge measurements, weather records, and records for nearby stations.

Small diversions for irrigation above station. Since Nov. 2, 1930, flow has been
regulated by operation of gates in Deadwood Dam, on Deadwood River. Slight regulation
by operation of Grimes Pass power plant.

Rating table, water year 1936—37 except periods of ice effect (gage height, in feet, and

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1	to Jan. 1		Feb. 28	to Sept.	30
0.10	310	0.10	305	2.80	1,975
.30	390	.40	435	3/10	2,225
.50	480	.70	590	3.40	2,485
•70	580	1.00	755	3.70	2,755
•90	680	1.30	935	4.00	3,030
1.10	790	1.60	1,115	4.30	3,315
1.30	910	1.90	1,310	4.60	3,610
		2.20	1.520	4.90	3,920
		2.50	1.740	5.20	4,250

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	495 535 540 535 540	525 485 399 540 635	520 540 550 550 560	408 320 350 430 500		515 568 566 546 552	930 1,240 1,080 935 905	1,860 2,310 2,940 3,410 3,710	2,660 2,580 2,660 2,840 2,660	1,340 1,280 1,210 1,150 1,150	965 965 965 965 995	1,210 1,180 1,180 965 1,020
6 7 8 9	535 530 510 510 762	620 585 540 535 565	600 686 670 635 600	380		574 612 618 650 662	905 816 785 845 8 75	3,710 3,510 3,320 3,320 3,410	2,400 2,220 2,140 2,310 2,580	1,120 1,080 1,020 995 935	995 1,020 995 1,020 1,020	935 905 706 711 875
11 12 13 14 16	820 820 820 605 585	585 580 580 580 585	515 520 565 610 645		500	700 785 785 875 905	875 905 1,240 2,760 3,120	3,220 3,120 3,120 3,410 3,610	2,400 2,220 2,100 2,020 1,940	905 905 1,020 1,240 1,240	1,060 1,080 1,180 1,240 1,210	875 8 4 5 785 7 85 75 5
16 17 18 19 20	585 575 580 585 580	600 605 590 575 560	660 640 625 625 585			1,020 995 935 815 755	2,480 1,980 1,780 1,740 1,740	3,610 3,710 3,810 4,140 3,710	1,980 2,100 1,940 1,900 2,060	965 875 645 845 965	1,240 1,310 1,310 1,310 1,380	785 875 875 935 995
21 22 25 24 25	575 535 510 515 515	560 555 540 515 530	490 471 462 462 466	490		672 645 678 650 678	1,940 1,860 1,650 1,450 1,480	3,510 3,610 3,920 3,810 4,030	2,480 2,600 2,310 2,020 1,780	965 995 1,080 1,060 1,120	1,340 1,340 1,340 1,340 1,340	905 785 785 875 875
26 27 28 29 50 31	515 516 510 505 510 525	515 505 480 450 500	448 453 440 334 354 440		500 - -	716 755 785 785 815 845	1,980 2,580 2,310 2,020 1,740	4,030 4,030 4,140 3,920 3,410 3,030	1,630 1,560 1,480 1,450 1,420	1,120 965 1,060 1,120 1,080 965	1,340 1,380 1,420 1,340 1,340	875 815 815 815 733

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acro-feet
October	17,777 16,419 16,721	820 635 686	495 399 334	573 547 539	35,260 32,570 33,170
Calendar year 1936	622,035	8,580	334	1,700	1,234,000
Jennary February Karch April Kay June June July August Beptember	13,758 14,000 22,459 46,945 108,400 64,520 32,615 37,055 26,475	- 1,020 3,120 4,140 2,840 1,340 1,420 1,210	320 - 515 785 1,860 1,420 845 965 706	444 500 724 1,565 3,497 2,151 1,052 1,195 882	27,290 27,770 44,550 93,110 211,000 128,000 64,690 73,500 52,510
Water year 1936-37	417,144	4,140	320	1,143	827,400

Payette River near Horseshoe Bend, Idaho

Location. - Water-stage recorder, lat. 43°56', long. 116°11'30", in SW4SW4 sec. 14, T. 7

N., R. 2 E., 100 feet east of tracks of Idaho Northern branch of Oregon Short Line
Railroad and 1½ miles north of Horseshoe Bend.
Drainage area. - 2,230 square miles.

Records available. - February 1906 to September 1916, July 1919 to September 1937.

Prior to November 1912, at site 2 miles upstream, in sec. 2.

Average discharge. - 25 years (1907-15, 1919-37), 2,950 second-feet.

Extremes. - Maximum discharge during year, 8,510 second-feet May 26 (gage height, 5.65
feet); minimum, 375 second-feet Nov. 3 (gage height, 0.40 foot), from rating curve
extended below 500 second-feet.

1908-16, 1919-37: Maximum discharge, 22,100 second-feet June 9, 1921 (gage height,
9.57 feet); minimum, 350 second-feet Dec. 17, 1935 (gage height, 0.26 foot), from
rating curve extended below 600 second-feet.

Remarks. - Records excellent except those for period of ice effect, Jan. 6 to Mar. 4, and
of Taulty intake action, Apr. 28-30, which were computed on basis of one discharge
measurement, weather records, and records for other stations in Payette River Basin
and are fair. Flow regulated by storage in Payette Lake, Lake Fork, and Deadwood
Reservoirs. Several irrigation diversions from tributaries above station.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.40	375	3.10	3,250
.70	540	3.40	3,740
1.00	765	3.70	4,270
1.30	1,025	4.00	4,850
1.60	1,320	4.30	5,460
1.90	1,640	4.60	6,100
2.20	1,990	4.90	6,780
2.50	2,380	5.20	7,490
2.80	2.800	5.50	8,250

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	603 662 662 662 678	662 655 528 618 842	640 693 749 749 749	582 464 492 582 701		740 820 820 820 800 774	1,620 2,180 1,810 1,670 1,600	3,570 4,000 4,750 5,460 6,100	6,320 5,670 5,050 4,950 4,650	2,120 1,990 1,810 1,810 1,620	1,480 1,490 1,480 1,450 1,480	1,410 1,370 1,360 1,140 1,190
6 7 8 9	678 685 662 662 867	824 790 709 670 6 93	799 576 884 842 799	540		799 842 858 884 910	1,570 1,460 1,410 1,460 1,520	5,880 5,670 5,360 5,460 5,560	4,460 4,270 4,090 4,090 4,460	1,660 1,720 1,670 1,630 1,560	1,500 1,510 1,490 1,500 1,480	1,120 1,090 910 876 1,010
11 12 13 14 15	1,060 1,050 962 765 717	757 790 757 774 774	685 648 685 774 833	}		962 1,060 1,110 1,230 1,270	1,550 1,570 1,990 3,910 4,560	5,560 5,360 5,460 5,880 6,320	4,650 4,650 4,460 4,090 3,740	1,490 1,460 1,540 1,750 1,810	1,490 1,500 1,560 1,610 1,580	1,060 1,020 989 910 910
16 17 18 19 20	725 733 725 741 733	808 824 808 765 749	850 8 24 808 799 774			1,460 1,460 1,440 1,270 1,170	5,560 5,150 4,560 4,360 4,270	6,320 6,550 7,010 7,740 7,740	3,490 3,570 3,570 3,740 4,180	1,540 1,410 1,360 1,350 1,450	1,570 1,630 1,620 1,600 1,650	944 1,020 1,010 1,040 1,100
21 22 23 24 25	733 717 662 655 655	749 725 717 678 678	685 670 693 648 670	670		1,050 1,030 1,040 1,030 1,070	4,360 4,360 3,820 3,330 3,180	7,490 7,490 7,740 7,490 7,990	4,950 5,050 5,250 4,750 4,090	1,490 1,530 1,610 1,570 1,550	1,630 1,620 1,610 1,580 1,570	1,040 926 910 980 998
26 27 28 29 30 31	648 648 655 655 648 655	678 648 603 582 640	648 648 632 516 492 625			1,130 1,200 1,240 1,250 1,300 1,370	3,900 4,700 4,500 3,900 3,500	8,250 7,990 8,250 8,250 7,740 7,010	3,330 2,800 2,450 2,320 2,250	1,660 1,520 1,570 1,610 1,610 1,480	1,560 1,610 1,670 1,560 1,540 1,550	959 944 926 935 533
			<u> </u>			 						

Month	Second- foot-days	Meximum	Minimm	Mean	Run-off in acre-feet
October	22,363 21,495 22,387	1,060 842 884	603 528 492	721 716 722	44,360 42,630 44,400
Calendar year 1936	1,073,604	17,400	492	2,933	2,129,000
January. February March. April May. June June July August. September.	19,071 19,600 33,389 93,330 201,440 125,390 49,950 48,170 30,960	1,460 5,560 8,250 6,320 2,120 1,670 1,410	464 740 1,410 3,570 2,250 1,350 1,450 833	615 700 1,077 3,111 6,498 4,180 1,611 1,554 1,032	37,830 36,880 66,230 185,100 399,600 248,700 99,070 95,540 61,410
Water year 1936-37	687,545	8,250	464	1,884	1,364,000

Payette River near Emmett, Idaho

Location.- Water-stage recorder, lat. 43°56', long. 116°27', in sec. 22, T. 7 N., R. 1 W., three-eighths of a mile below Black Canyon Dam and 5 miles northeast of Emmett.

Records available. - June 1925 to September 1937.

Average discharge. - 12 years, 2,610 second-feet.

Extremes. Maximum discharge during year, 9,690 second-feet Apr. 15 (gage height, 8.20 feet); minimum, 17 second-feet Feb. 14 (gage height, 1.39 feet). 1925-37: Maximum discharge, 22,000 second-feet May 27, 1928 (gage height, 12.75 feet); minimum, 6.4 second-feet Feb. 21, 1932 (gage height, 1.01 feet).

Remarks.- Records excellent except those for period of ice effect or missing gage heights, Jan. 3 to Feb. 2, which were computed on basis of weather records and records for other stations in Payette River Basin and are fair. Diversions for irrigation above station. Flow affected at times by operation of gates in Black Canyon Dam and by storage of water in reservoirs upstream. Gage-height record collected in cooperation with Bureau of Reclamation.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.30 10 4.80 3,220 1.70 2.00 2.40 3,800 4,430 5,100 101 5.60 6.00 6.40 258 560 5,820 6,590 7,410 8,280 2.80 915 6.80 1,315 1,740 2,190 2,680 3.60 4.00 8.00 9,210

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.
1 2 3 4 5	488 472 464 464 464	698 732 717 664 683	908 864 913 917 915	915 523	700 700 692 832 780	877 1,050 1,160 1,030 811	1,800 3,150 2,620 2,020 1,960	3,500 3,950 5,100 6,010 6,390	6,390 5,820 5,280 4,930 4,590	1,580 1,740 1,370 1,320 1,320	1,020 1,020 1,040 1,030 1,020	1,100 1,000 1,010 972 757
6	456	817	906		734	739	2,070	6,390	4,430	1,110	1,010	811
7	464	846	1,040		616	1,000	1,960	6,010	4,190	1,210	1,020	688
8	416	804	1,070		708	1,160	1,580	5,820	3,950	1,260	1,020	645
9	416	711	1,170		674	1,160	1,680	5,640	3,950	1,160	1,070	560
10	628	678	1,020		601	1,210	1,630	5,820	4,430	1,110	1,100	560
11	662	697	773		681	1,320	1,220	5,820	4,760	1,110	1,110	577
12	662	765	897		772	1,470	1,420	5,820	4,430	1,110	1,110	654
13	662	794	764		844	1,680	1,420	5,460	4,430	1,110	1,110	670
14	654	765	951		681	2,190	1,630	6,200	4,030	1,110	1,110	662
15	416	625	1,030		594	2,070	7,410	6,590	3,580	1,110	1,110	670
16	416	772	1,060	630	775	2,250	7,200	6,590	3,290	1,110	1,110	704
17	424	796	1,100		748	2,250	5,820	6,990	3,500	1,100	1,110	704
18	424	825	1,130		713	2,250	5,100	7,200	3,430	1,090	1,160	670
19	424	784	930		739	1,900	4,930	8,060	3,500	1,080	1,110	645
20	480	733	890		696	1,630	4,760	7,840	3,950	1,090	1,110	654
21	722	731	842		696	1,520	4,930	7,620	3,430	1,100	1,110	645
22	734	727	781		696	1,370	4,930	7,620	4,930	1,100	1,110	645
23	636	717	694		739	1,420	3,950	8,060	5,280	1,110	1,110	636
24	604	706	817		793	1,370	3,360	7,840	4,760	1,110	1,110	636
25	609	720	613		802	1,320	3,290	7,840	3,950	1,050	1,110	636
26 27 28 29 30 31	600 620 687 713 685 705	630 690 672 571 892	690 706 693 612 425 652		811 830 839 - -	1,370 1,420 1,520 1,470 1,470 1,580	3,880 4,930 5,100 4,430 3,650	8,510 8,280 8,280 8,280 7,840 7,200	3,080 2,550 1,900 1,900	1,070 1,110 1,100 1,060 1,030 991	1,160 1,160 1,050 1,030 1,070 1,110	645 645 645 679 636

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	17,271 21,962 26,773	734 892 1,170	416 571 425	557 732 86 4	34,260 43,560 53,100
Calendar year 1936	1,110,042	20,400	416	3,033	2,202,000
January February March March April May June June July August September	19,708 20,486 45,037 103,830 208,570 120,540 36,030 33,630 21,161	915 844 2,250 7,410 8,510 6,390 1,740 1,160	523 594 739 1,220 3,500 1,900 1,910 560	636 732 1,453 3,461 6,728 4,C18 1,162 1,085 705	39,090 40,630 89,330 205,900 413,700 239,100 71,470 66,700 41,970
Water year 1936-37	674,999	8,510	416	1,849	1,339,000

Payette River near Payette, Idaho

Location.- Wire-weight gage, lat. $44^{\circ}02^{\circ}30^{\circ}$, long. $116^{\circ}55^{\circ}30^{\circ}$, in SW½ sec. 10, T. 8 N., R. 5 W., at highway bridge, $1\frac{3}{2}$ miles south of Payette.

Records available.- August 1935 to September 1937. January 1895 to July 1897 (incomplete), at site 2 miles downstream.

Extremes. Maximum discharge observed during year, 8,950 second-feet May 19 (gage height, 7.97 feet); minimum, 340 second-feet Oct. 9 (gage height, 2.80 feet).
1935-37: Maximum discharge observed, 20,600 second-feet Apr. 24, 1935 (gage height, 11.27 feet); minimum, 180 second-feet Oct. 13, 20, 1935 (gage height, 2.04

Remarks.- Records good except those for period of ice effect, Jan. 4 to Feb. 18, which were computed on basis of records for station near Emmett and are fair. Numerous diversions for irrigation above station. Flow is also regulated by operation of gates in Black Canyon Dam and by storage of water in reservoirs on tributary streams. Gage read twice daily.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

2.80	340	5.20	2,930
3.00	455	5.60	3,550
3.20	590	6.00	4,230
3.40	745	6.40	4,990
3.60	920	6.80	5,830
4.00	1,340	7.20	6,760
4.40	1,830	7.60	7,800
4.80	2.360	8.00	8.950

Day	Oct.	No▼.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	745 455 378 384 390	875 875 920 920 930	1,070 970 970 830 1,070	920 970 920		1,120 1,340 1,520 1,400 1,230	1,960 3,390 3,390 2,780 2,090	3,230 3,230 4,230 5,400 5,830	6,050 5,400 4,990 4,600 4,230	1,230 830 970 745 705	555 520 520 520 520 520	705 665 590 628 590
6 7 8 9 10	378 373 378 362 378	920 970 970 970 970	1,400 1,020 1,180 1,230 1,280		950	1,020 1,180 1,400 1,700 1,460	2,640 2,640 1,960 1,960 2,090	6,280 5,830 5,190 5,400 5,400	4,230 3,880 3,710 3,550 3,710	628 590 590 555 488	488 488 455 488 488	520 520 443 419 384
11 12 13 14 15	520 590 590 590 590	920 920 920 970 970	970 970 1,020 920 1,070			1,580 1,760 1,960 3,230 2,780	1,760 1,700 1,640 1,700 4,990	5,610 5,610 5,400 5,610 6,280	4,410 4,410 4,050 3,880 3,710	425 419 443 437 455	520 520 520 520 520	362 368 384 384 395
16 17 18 19 20	407 455 455 488 488	830 970 970 970 970	1,120 1,180 1,180 1,070 1,120	800	1,020	2,640 2,930 2,780 2,640 2,090	7,530 6,280 5,400 5,190 4,790	6,520 6,760 7,010 8,360 8,360	3,230 3,230 3,390 3,390 3,710	455 455 431 431 443	520 555 555 555 555	390 407 407 419 425
21 22 23 24 25	590 745 788 705 705	970 970 920 920 920	1,070 970 920 875 1,020		875 875 875 970 1,020	1,900 1,700 1,700 1,640 1,580	5,190 5,400 4,410 3,710 3,390	8,080 7,530 8,080 7,800 7,800	4,600 4,790 4,790 4,790 4,230	431 443 498 488 520	555 555 590 590 590	488 455 488 488 520
26 27 28 29 30 31	705 705 788 920 920 830	920 875 920 705 830	788 920 875 920 830 590		1,020 1,070 1,120	1,520 1,520 1,700 1,640 1,520 1,760	3,550 4,600 5,190 4,600 3,710	8,360 8,360 8,080 8,080 7,800 6,760	3,230 2,360 1,830 1,340 1,280	555 628 590 590 590 520	628 665 628 555 590 628	520 520 520 520 520 555

Month	Second- foot-days	Maximum	Minimm	Mean	Run-off in acre-feet
October	17,795 27,580 31,418	920 970 1,280	362 705 590	574 919 1,013	35,300 54,700 62,320
Calendar year 1936	1,088,847	19,800	340	2,975	2,160,000
January February March April May June July July August August August August Beptember	25,210 26,915 55,940 109,630 202,270 115,000 17,568 16,956 14,479	3,230 7,630 8,360 6,050 1,230 665 705	1,020 1,640 3,230 1,280 419 488 362	813 961 1,805 3,654 6,525 3,833 567 547 483	50,000 53,390 111,000 217,400 401,200 228,100 34,850 33,630 28,720
Water year 1936-37	660,761	8,360	362	1,510	1,311,000

Deadwood Reservoir near Lowman, Idaho

Location.- Staff gage, lat. 44°18', long. 115°39', in SE½ sec. 8, T. 11 N., R. 7 E., at Deadwood Dam, 15 miles north of Lowman. Gage readings are elevations above mean sea

Drainage area .- 108 square miles.

Records available .- October 1935, to September 1937.

Extremes. Maximum elevation observed during year, 5,323.6 feet July 11, 12; minimum, 5,286.7 feet Sept. 30. 1936-37: Maximum elevation observed, 5,331.5 feet July 2,1956; minimum, 5,260.1 feet Oct. 1, 1935.

Remarks.- Capacity of reservoir is reported to be 160,400 acre-feet between elevations 5,230.0 and 5,334.0 feet. Stored water is used in operation of Black Canyon power plant near Emmett. During the late fall of 1936, the Bureau of Reclamation cut an intermountain canal to divert a small flow of water from a tributary of Johnson Creek to Deadwood River Basin for supplemental storage in Deadwood Reservoir. Measurements of July 14 and 25 indicated flow in diversion of 4.82 and 1.76 second-feet, respectively, Gage read once daily. Gage-height record furnished by the U.S. Bureau of Reclamation.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.
1	293.8	291.3	288.9	287.7	288.7	289.1	290.1	294.6	313.7	322.6	319.5	300.8
2	293.8	291.3	288.7	287.8	288.7	289.1	290.2	294.9	314.1	322.7	319.2	300.0
3	293.8	291.3	288.6	287.8	288.7	289.1	290.3	295.3	314.5	322.8	318.9	299.2
4	293.7	291.2	288.5	257.9	288.8	289.1	290.4	295.8	314.9	322.9	318.6	298.7
5	293.7	291.1	288.4	288.0	288.8	289.1	290.4	296.5	315.3	323.0	318.3	298.2
6	293.7	291.0	288.3	288.0	288.8	289.1	290.5	297.2	315.7	323.1	318.0	297.8
7	293.7	290.9	288.2	288.1	288.8	289.0	290.6	297.8	316.0	323.2	317.6	297.2
8	293.7	290.8	288.1	288.2	288.8	289.0	290.6	298.4	316.3	323.3	317.3	297.0
9	293.2	290.7	288.0	288.2	288.8	289.0	290.7	298.9	316.6	323.4	316.9	296.8
10	293.2	290.6	287.9	288.2	288.8	289.0	290.8	299.5	317.1	323.5	316.5	296.3
11	292.8	290.5	287.8	288.4	288.8	289.0	290.9	300.0	317.5	323.6	316.1	295.8
12	292.4	290.5	287.6	288.4	288.9	289.0	291.0	300.5	317.8	323.6	315.7	295.4
13	292.1	290.4	287.5	258.4	288 .9	289.0	291.1	301.1	318.1	323.5	315.2	294.9
14	292.0	290.3	287.4	258.4	288.9	289.1	291.3	301.7	318.4	323.3	314.7	294.6
15	291.9	290.2	287.3	288.5	288.9	289.1	291.5	302.4	318.7	323.0	314.0	294.2
16	291.8	290.1	287.2	288.6	288.9	289.1	291.7	303.1	318.9	323.0	313.4	293.7
17	291.7	590.0	287.1	288.5	289.0	289.1	291.9	303.8	319.3	323.0	312.8	293.2
18	291.6	290.0	287.0	288.6	289.0	289.1	292.0	304.5	319.5	323.0	312.1	292.7
19	291.5	289.9	286.8	288.6	289.0	289.2	292.1	305.3	-	322.9	311.4	292.0
20	291.4	289,8	286.9	288.6	289.0	289.2	292.3	306.0	320.2	322.8	310.6	291.4
21	291.3	289.8	287.0	288.6	289.0	289.3	292.5	306.7	320.5	322.6	309.9	290.5
22	291.3	289.7	287.0	288.6	289.0	289.4	292.6	307.4	320.8	322.4	309.1	290.4
23	291.3	289.6	287.1	288.6	289.1	289.5	292.8	308.1	321.1	322.2	308.3	290.0
24	291.5	289.6	287.2	288.6	289.1	289.6	292.9	308.8	321.4	321.9	307.5	289.5
25	291.3	289.5	287.3	288.6	289.1	289.7	293.1	309.4	321.6	321.6	306.7	289.0
26	291.3	289.4	287.4	288.6	289.1	289.8	293.3	310.2	321.8	321.3	306.0	288.5
27	291.3	289.3	287.4	288.6	289.1	289.8	293.6	310.9	322.0	321.1	305.1	288.0
28	291.3	289.2	287.5	288.6	289.1	289.8	293.8	311.6	322.1	320.8	304.1	287.5
29	291.3	289.1	287.6	288.6	-	289.9	294.0	312.2	322.2	320.4	303.3	287.1
30	291.3	289.0	287.6	288.7	-	290.0	294.3	312.8	322.4	320.0	302.4	286.7
31	291.3	-	287.6	288.7	-	290.0	-	313.4	-	319.8	301.5	-

Note .- Add 5,000 feet to obtain elevations above mean sea level.

Deadwood River below Deadwood Reservoir, near Lowman, Idaho

Location. - Water-stage recorder, lat. 44°13', long. 115°39', in NE; sec. 17, T. 11 N., R. 7 E., 300 feet above mouth of Wilson Creek, a quarter of a mile below Deadwood Dam at lower end of Deadwood Basin, 15 miles north of Lowman, and 18 miles above mouth of Deadwood River.

wood River.
Drainage area.- 108 square miles.
Records available.- October 1926 to September 1937.
Average discharge.- 10 years, 174 second-feet.
EXtremes.- Maximum discharge during year, 1,070 second-feet Aug. 27 (gage height, 4.20
feet); practically no flow Dec. 20 to Jan. 12, Mar. 20-31.
1927-37: Maximum discharge, 2,150 second-feet May 28, 1928 (gage height, 5.67 feet,

at former site and datum); practically no flow for long periods when gates in dam were closed.

closed.

Remarks.- Records good except those for periods when reservoir gates were closed, Dec. 20 to Jan. 12. Mar. 20 to July 10. which are poor. Discharge for Nov. 28, Dec. 19, Jan. 13, Mar. 19. July 11, Sept. 30, computed on basis of reported gate changes. Flow regulated since Nov. 2, 1930, by operation of gates in Deadwood Bam. During the late fall of 1936, the U. S. Bureau of Reclamation cut an intermountain canal to divert a small flow of water from a tributary of Johnson Creek to Deadwood River basin for supplemental storage in Deadwood Reservoir. Measurements of July 14 and 25 indicated flow in diversion of 4.82 and 1.76 second-feet, respectively. Once daily staff gage readings Nov. 4 to Mar. 19 and gage-height record for Oct. 1 to Nov. 3 and July 11 to Sept. 30, furnished by U. S. Bureau of Reclamation.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

July 11 to Sept. 30 Oct. 1 to Mar. 19 0.70 36 49 71 0.70 34 57 95 481 1.70 1.90 184 233 2.80 1.00 592 714 1.10 3.40 2.10 286 101 149 218 3.70 4.00 S44 980 1.60 1.90 1.50 2.50 2.20 296 4.20 1,072 2.50 383

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2	65	46	148	0	49	49)	4	402	800
3	66 66	46 69	148 148	0	49 49	49		l	11	4	402	800
1 2	69	119	148	0	49 49	49 49		l		4	402	652
ιš	69	119	148	ő	49	49 49		1	11	4	437 467	524 492
-	0.5	110	140	٥	40	49		l	11	4	467	492
6	57	119	148	0	49	49		1	11	4	499	471
7	45	119	150	ō	49	49			١ ـ	4	499	356
B	48	119	150	0	49	49			3	4	517	291
9	251	119	148	0	49	49		ŀ	11	4	524	395
10	398	119	148	0	50	49		l		4	547	485
111				. 1					11	-		
12	395 398	119 1 19	148	0	50	49		ì	11	34	573	485
13	238	119	148 148	0 15	50	49		į.	11	141	652	450
14	127	119	148	50	50 50	49 50			11	345	756	405
15	131	119	146	49	50	50	ļ		1	427	778	398
1 1	101	110	140	45	50	50		1	*3	267	778	417
16	131	119	146	49	50	49			11	130	844	485
17	131	119	146	49	50	49		1	11	105	888	517
18	131	119	146	49	50	49	1	l	11	117	888	543
19	131	119	128	49	50	41	İ	İ	11	238	934	592
20	131	108	0	49	50	0			11	274	957	532
1 1			1					ł	11			002
21 22	96	101	0	49	50	0		1	11	313	957	424
25	54 56	101	0	49	50	0	1	i	11	289	957	383
24	56 56	101	0	49	52	0		l	> 3	414	957	437
25	5 1	101 10 1	0	49 49	52	0	l		11	447	957	464
1~1	51	101	١٠١	49	49	0	l		11	464	957	464
26	54	101	0	49	49	0			11	289	000	407
27	51	101	ő	49	49	ŏ	Į.	Į.	11	411	980 1,050	427 405
28	46	107	ŏ	49	49	ŏ	l	1	11	495	1,000	405
29	49	150	ŏ	49	-	l ŏ	l	I	11	524	934	298
30	53	148	ō	49	-	ŏ	ĺ	1	H	440	957	169
31	54	_	ō	49	-	ŏ	l		l' -	398	866	100

				2901 0	900
Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,698 3,285 2,788	398 150 150	45 46 0	119 110 89.9	7,330 6,520 5,530
Calendar year 1936	64,458	1,150	0	176	127,800
January Pebruary March March April Kay Jun July August September	898 1,391 925 30 62 90 6,602 23,316 13,966	50 52 50 - - 524 1,050 800	0 49 0 - - - 4 402 169	29.0 49.7 29.8 1.0 2.0 3.0 213 752 466	1,780 2,760 1,830 60 123 179 13,090 46,250 27,700
Water year 1936~37	57,051	1,050	0	156	113,200

*Discharge measurement.

PAYETTE RIVER BASIN

Deadwood River near Lowman, Idaho

Location.- Water-stage recorder, lat. 44°05', long. 115°40', in sec. 29, T. 9 N., R. 7 E., 700 feet above mouth of river and 2½ miles west of Lowman.

Drainage area. - 201 square miles.

Records available. - August 1921 to September 1937.

Average discharge. - 16 years, 345 second-feet.

Extremes. Maximum discharge during year, 1,130 second-feet Aug. 27 (gage height, 3.14 feet); minimum discharge observed, 38 second-feet Dec. 28, 29 (gage height, 0.98

1921-37: Maximum discharge, 4,230 second-feet May 9, 1928 (gage height, 5.17 feet): minimum, 28 second-feet Nov. 4, 1935 (gage height, 0.83 foot).

Remarks.- Records good except those for periods of ice effect or missing gage-heights, Dec. 2-17, Dec. 30 to Mar. 8, Mar. 10-15, which were computed on basis of one discharge measurement, weather records, and records for nearby stations and are fair. Flow regulated by storage in Deadwood Reservoir. Small amount of water diverted from tributary of Johnson Creek to Deadwood River Basin during the year.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Mar. 9 to Sept. 30
1.10 58 2.30 481
1.40 112 2.60 674
1.70 196 2.90 906
2.00 319 3.20 1.190
•

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	100 115 118 120 122	100 71 87 160 167	193 *195 195 195 195			95 95 95 95 95	87 102 84 77 73	265 369 464 542 587	364 349 344 329 305	122 117 112 108 106	493 493 493 505 542	856 856 769 613 587
6 7 8 9 10	122 102 104 192 481	163 157 160 163 160	200 210 210 210 200	45		100 100 100 99 100	73 66 70 73 75	568 548 518 530 542	287 269 261 291 319	102 97 95 93 89	568 574 580 593 600	555 493 364 412 548
11 12 13 14 15	475 469 380 180 180	160 160 163 163 167	190 190 195 200 200			110 110 120 120 125	77 78 144 324 329	518 499 524 568 580	282 265 240 225 218	87 161 378 536 442	626 674 761 808 808	548 524 481 469 475
16 17 18 19 20	180 176 183 183 183	167 170 167 167 163	200 200 176 176 85	90		126 117 114 102 84	261 214 203 193 200	561 574 587 600 555	225 228 207 214 265	252 186 186 273 369	840 906 906 942 986	518 574 587 626 606
21 22 23 24 25	180 100 98 100 100	154 154 152 152 152	48 47 47 47 46			60 61 60 58 61	240 214 180 158 174	536 530 536 518 548	240 210 190 177 167	391 469 505 524 561	977 977 977 977 977	518 452 487 536 536
26 27 28 29 30 31	95 98 89 89 95 100	149 146 140 152 176	43 48 40 41 40 40	95		66 70 73 72 75 77	269 349 301 248 221	548 524 518 481 435 401	156 147 139 131 129	518 481 568 606 555 493	1,000 1,080 1,060 995 1,000 933	512 481 475 364 375

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,309 4,562 4,302	481 176 210	89 71 40	171 152 139	10,530 9,050 8,530
Calendar year 1936	136,339	1,510	40	373	270,400
January February March April May June June July August September	2,195 2,660 2,835 5,157 16,074 7,173 9,582 24,651 16,197	126 349 600 364 606 1,080	- 58 66 265 129 87 493 364	70.8 95.0 91.5 172 519 239 309 795 540	4,350 5,280 5,620 10,230 31,880 14,230 19,010 48,890 32,130
Water year 1936-37	100,697	1,080	-	276	199,700

^{*}Discharge measurement.

⁷⁷⁷⁹⁴ O-38--10

· Payette Lake at Lardo, Idaho

Location.- Staff gage, lat. $44^{\circ}55^{\circ}$, long. $116^{\circ}07^{\circ}$, in sec. 8, T. 18 N., R. 3 E., at outlet of lake at Lardo. Zero of gage is 4,982.24 feet above mean sea level.

Drainage area .- 131 square miles.

Records available. - August 1921 to September 1937 (fragmentary).

Extremes.- Maximum stage observed during year, 8.08 feet June 19; minimum, 1.25 feet Nov. 24. 1921-37: Maximum stage observed, 8.75 feet July 13, 1935; minimum, 0.95 foot Oct. 3, 1931.

Remarks.- No diversions above station. Regulation of storage for use in lower Payette
RIVER Valley effected by flashboards on dam in outlet channel. Because of location of
gage in outlet channel, gage heights show slightly lower elevations at times than those
that prevailed on main lake. Gage-height record furnished by U. S. Forest Service,
supplemented by reports from Bureau of Reclamation, July 6 to Aug. 14.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	1.45	1	1 1 1	11111		2.71	3.16 - 3.20	1111	7.85 7.76	7.98	4.25 4.10 3.95 3.80 3.60	-
6 7 e 9 10	- - - 1.42	1.32	1.46	11111	-	-	-	4.62 4.75 4.05	7.75	7.74 7.60 7.48 7.36 7.25	3.45 3.30 3.15 3.05 2.90	1.77 1.75
11 12 13 14 15	1	1.34	-	1.56	2.42	= = = = = = = = = = = = = = = = = = = =	-	5.60	7.95	7.10 6.98 6.82 6.68 6.58	2.84 2.75 2.69 2.60	-
16 17 18 19 20	1.38		-	1111	-	- - -	3.48 - 3.49 3.50	1111	8.08	6.55 6.31 6.12 6.00 5.94	-	1.62
21 22 23 24 25	1.34	1.25	1.46		-	2.98	- - 3.54	6.60 - -	7.88	5.80 5.66 5.52 5.41 5.25	2.18	1.53
26 27 28 29 30 31	1.32		1.56	1.55	-	=		7.30 - 7.45 -	7.9 7 - - - -	5.14 5.03 4.90 4.75 4.55 4.40	1.98	-

218

157,700

North Fork of Payette River at Lardo. Idaho

Location.- Water-stage recorder, lat. 44°54'30", long. 116°07'30", in sec. 8, T. 18 N., R. 3 E., a quarter of a mile below Lardo and outlet of Payette Lake.

Drainage area .- 131 square miles.

Records available .- September 1908 to June 1917, May 1919 to September 1937.

Average discharge. - 28 years (1908-16, 1919-37), 340 second-feet.

Extremes.- Maximum discharge during year, 2,000 second-feet May 28 (gage height, 5.53 feet); minimum discharge observed, 0.5 second-foot Dec. 9 (estimate by field engineer). 1908-17, 1919-37: Maximum discharge, 4,280 second-feet June 10, 1933; maximum gage height, 7.5 feet June 5, 1909, June 10, 1933; minimum, practically no flow Nov. 5-8, 1931, Nov. 17-24, 1933, Nov. 14-27, 1935.

Remarks.- Records good except those for discharges below 5 second-feet, which are poor.

Records for periods of ice effect or missing gage-heights, Nov. 23 to Apr. 2 computed on basis of three discharge estimates by field engineers, weather records, and records for Payette Lake. Flow partly regulated by storage in Payette Lake. No diversions above station. Gage-height record collected in cooperation with U. S. Forest Service.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Ma	r.	Ap	r.	May	June	July	Aug	. Sept.
1 2 3 4 5	11 11 10 10	1 1 1 1						_	6 8 10 12 15	148 172 220 285 380	992 648 737 950 1,060	214 205 202 305 389	36 34 37 37 38	5 49 1 47 6 47
6 7 8 9 10	99988	1 1 1 1							20 21 21 23 24	475 555 610 689 779	1,020 818 713 767 985	402 402 389 384 371	34 34 31 29 27	1 42 2 39 3 36
11 12 13 14 15	7 5 2 1	1 1 1 1					1		27 27 36 51 58	850 915 915 882 985	1,090 985 785 495 417	371 389 394 371 358	25 24 22 21 20	3 30 7 27 4 26
16 17 18 19 20	1 1 1 1	1 1 1 1							64 69 72 73 76	1,090 1,250 1,420 1,640 1,640	638 850 850 850 1,330	371 371 389 412 417	18 16 16 15	9 21 2 20 0 19
21 22 23 24 25	1 1 1 1 1	1 1 1 1							79 86 88 88 89	1,600 1,680 1,780 1,730 1,600	1,780 1,600 1,170 689 310	412 407 417 421 394	12 11 10 10	9 18 9 15
26 27 28 29 30 31	1 1 1 1 1 1 1 1	1 1 1 1				}	3]	98 111 121 128 134	1,780 1,910 1,960 1,910 1,730 1,500	220 243 337 320 256	366 362 389 376 366 366	8 7 6	9 12 1 11 5 10 6 10 1 9
		1	ionth				cond t-da		Maz	cimum	Minimum	Mean	n.	Run-off in acre-feet
NGA	ember							128 30 31		11 1	1 1		4.1 1.0 1.0	254 60 61
C	alendar	year 193	6	· · · · · · · · ·			113,	081		3,150		3	09	224,300
Mar Apr May Jun Jul Aug	January February Marcin Marcin May Jord May July July May August August August August August August August					35,0 23,9 11,1	905 l		134 1,960 1,780 421 376 52	- 6 148 220 202 56 9	1,1	1.0 1.3 57.8 32 97 67 03 26.9	61 56 77 3,440 69,580 47,410 22,580 12,510 1,600	

1,960

79,503

Water year 1936-37.....

Lake Fork of Payette River above reservoir near McCall, Idaho

Location. - Water-stage recorder, lat. 44°55', long. 116°00', in NW1 sec. 8, T. 18 N., R. 4 E., three-quarters of a mile below power plant and 5 miles east of McCall.

Records available .- May 1926 to September 1937 (irrigation seasons only).

Extremes.- Maximum discharge during year, 1,120 second-feet June 20 (gage height, 5.10 feet); minimum discharge recorded 2 second-feet Oct. 30, 31, Dec. 10, due to regulation by power plant; minimum (gage height, 0.13 foot) Oct. 30, 31.

1928-37: Maximum discharge observed, 2,520 second-feet June 9, 1933 (gage height about 7.9 feet, present datum, from high-water mark); minimum discharge, that of Oct. 30,31, Dec.10, 1936.

Remarks.- Records good except those for period of incomplete or missing gage heights,
Apr. 1. 3-10, May 12-15, 30, 31, June 1, 23, which were computed on basis of records
for stations on nearby streams and are fair. Diurnal fluctuations at low stages
caused by operation of power plant of McCall Light & Power Co. and small storage reservoirs above station. No diversions for irrigation above station. Gage-height
record furnished by Lake Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Deg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	5 5 6 7 14	7					10 10 10 10 11	148 226 287 465 495	380 466 524 425 327	174 159 138 121 103	30 31 29 28 27	8 5 16 11 9
6 7 8 9 10	14 13 12 5 5	1111	#2				13 13 13 14 15	435 408 395 435 424	294 305 316 466 554	86 75 69 61 66	25 24 24 24 24 24	18 S 18 7 16
11 12 13 14 15	6 14 13 13						17 22 24 98 114	407 380 470 600	399 338 316 305 316	58 52 44 45 44	23 22 22 24 23	7 8 16 7
16 17 18 19 20	5 6 6 16 14	-					80 65 61 65 70	603 608 642 653 502	362 338 284 327 757	42 40 43 44 41	22 21 21 20 19	7 7 8 8
21 22 25 24 25	13 6 6 6 7	*16					83 74 64 60 70	535 625 639 591 731	524 438 350 284 253	39 38 36 32 34	19 19 19 19	18 8 8 9
26 27 28 29 50 31	16 14 14 13 5 5	- 8 8 7					120 149 122 100 99	707 704 669 509 400 380	238 227 193 193 183	37 35 31 30 29 27	19 19 17 8 11 17	9 18 8 7 8

Month	Second- foot-days	Maximum	Minimo	Mean	Run-off in aore-feet
October	297 - -	16 - -	-	9.6 -	589 - -
Calendar year					
January. February Barch. April Say June July August. September.	1,676 15,673 10,682 1,873 669 304	149 731 757 174 31	10 148 183 27 8 7	55.9 506 356 60.4 21.6	3,320 31,090 21,190 3,720 1,330 603
Water year					

^{*}Discharge measurement.

Lake Fork Reservoir near McCall, Idaho

Location.- Staff gage, lat. 44°54', long. 116°03', in NW\(\frac{1}{2}\)NW\(\frac{1}{2}\) sec. 13, T. 18 N., R. 3 \(\frac{5}{2}\). 3 miles east of McCall. Zero of gage is at mean sea level.

Records available .- April 1926 to September 1937.

Extremes. - Maximum contents during year, 19,010 acre-feet June 21 (gage height, 5,118.30 feet); probably no storage during winter.

1928-37: Maximum contents, that of June 21, 1937; probably no storage during fall and winter.

Remarks. - Water stored in reservoir is used for irrigation of 6,800 acres of land near Norwood. Elevation of gate sill of outlet is 5,097.0 feet. Gage-height record and table of contents furnished by Lake Irrigation District.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	16,940	18,280	8,163	667
2		ļ .			j	1	}	l -	17,330	18,200	7,966	579
3					ì	1	1	-	17,890	18.010	7,525	510
4		1 .			l	ļ	J	-	18,050	17.760	7,273	461
5								-	17,890	17,570	6,920	413
6					Ì	Ì	i	-	17,810	17,250	6,594	384
7		ļ			J		J	J -	17,730	16,940	6,302	346
8		1	(-	17,890	16,630	6,012	298
9		ŀ	0		ŀ])) -	18,200	16,300	5,606	264
10							i	11,840	18,700	15,930	5,258	216
11		1				{	l	12,930	18,680	15.620	4,970	197
12		ļ				l	1	13,620	18,600	15,230	4,652	139
13		i I				ſ	[14,310	18,440	14.850	4,359	101
14					l	i		14,920	18,440	14,460	4,034	5 5
15							l	15,230	18,440	14,080	3,754	14
16		1					ł	15.510	18,440	13.770	3-453	0
17		1		i .	1	1	1	15,460	18,520	13,390	3.210	o l
18		[]			ĺ		ſ	15,620	18,520	13,000	3,008	0
19	_							15,850	18,600	12,620	2,736	0
20	Q	[15,700	18,850	12,240	2,525	0
21				١			ł	15,660	19.010	11.940	2.175	o
22								16.320	18,930	11.570	1.959	ō
23		ì					1	16.780	18.930	11.190	1,727	, oi
24		0						16,940	18,930	10,820	1,557	Ō
25		i i	·				ĺ	17,250	18,680	10,530	1,412	0
26)	}	15,570	18,680	10,100	1,285	0
27				· '	1		l	17,660	18.600	9.868	1,179	ŏ
28		1		'			ı	17.570	18,440	9,551	1,063	ŏ
29		1			ľ	1	}	17,250	18,440	9,176	950	8
30		1 1				1	1	16,940	18,360	8,838	853	0
31		[]						16,780	-	8,433	755	-

Lake Irrigation District Canal near McCall, Idaho

Location.- Staff gage, lat. 44°54', long. 116°03', in SW2 sec. 13, T. 18 N., R. 3 E., 600

feet below head of canal, half a mile south of Lake Fork Reservoir, and 3 miles east of McCall.

Records available .- May 1926 to September 1937.

Extremes. - Maximum discharge observed during year, 146 second-feet July 12-17 (gage height, 4.93 feet); no flow during nonirrigation season.

1928-37: Maximum discharge, that of July 12-17, 1937; no flow during nonirrigation eeasons.

Remarks. - Records good except those for period of missing gage heights Oct. 1-31, which Were estimated on basis of gate changes and discharge measurement of Oct. 20 and are fair. Flow is regulated at head gate of canal. No diversions between head of canal and station. Canal diverts water from right bank of Lake Fork of Payette River in SW\{\frac{1}{2}}\sec. 13, T. 18 N., R. 3 E., for irrigation of 6,800 acres of land near McCall and Norwood, in the Lake Irrigation District project. Gage-height record furnished by watermaster for Lake Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Deq.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5								0 0 0 0	48 51 56 63 70	120 126 130 137 133	125 123 121 121 121	33 30 20 14 14
6 7 8 9 10								0 0 0 0	81 86 92 98 93	135 136 137 137 140	121 121 121 121 121	14 14 15 14
11 12 13 14 15								0 0 0 0	76 69 69 69 75	142 145 146 146 146	120 117 115 113 104	14 14 14 14 14
16 17 10 19 20						i		0 2 4 4 5	85 85 81 73 69	146 145 144 144 144	100 100 97 95 91	14 14 14 12 12
21 22 23 24 25								7 9 12 13 17	71 69 69 72 77	144 143 142 142 140	89 79 71 69 68	12 12 12 12 10
26 27 28 29 30 31								21 25 29 40 46 47	82 86 96 110 115	136 135 135 131 126 125	54 43 44 40 39 36	6 6 6

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	31 0 0	 0 0	 0 0	1.0 0 0	61 0 0
Calendar year 1936	7,013	130	0	21.3	15,500
January. February. March. April Say Jun Jun Jun August. September.	0	0 0 0 47 115 146 125	0 0 0 0 48 120 36 6	0 0 0 9.1 77.9 138 93.5	0 0 0 0 557 4,630 8,490 5,750 805
Water year 1936-37	10,232	146	0	20.0	20,290

Weiser River at Tamarack. Idaho

Location.- Staff gage, 44°57', long. 116°23', in sec. 30, T. 19 N., R. 1 E., 0.4 mile southeast of Tamarack, Adams County.

Drainage area.- 36.5 square miles.

Records available.- September 1936 to September 1937.

Extremes.- Maximim discharge observed during period of record, 253 second-feet April 14 (gage height, 3.99 feet); minimum, 2.67 second-feet (discharge measurement)

February 12; minimum gage height, 0.69 foot Sept. 18, 19, 1937.

Remarks.- Records good except those for period of ice effect, Dec. 1 to Mar. 3, which were computed on basis of three discharge measurements and weather records and are poor. No diversions or regulation. Bureau of Reclamation furnished results of five discharge measurements. Gage read twice daily.

Rating table, September 1936 to September 1937, except periods of ice effect (gage height, in feet, and discharge, in second-feet) (Shifting-control method used June 28 to August 29)

0.70	3	2.20	70
1.00	9.5	2.50	97
1.30	19	3.10	157
1.60	32.5	4.00	254
1,90	49		

Discharge, in second-feet, Sept. 16-30, 1936

Sept. 16	5.8	Sept. 21	5.4	Sept.	26	5.0
17	5.8	22	5.2		27	5.0
18	5.8	23	5.0		28	5.0
19	5.6	24	5.0		29	5.2
20	5.4	25	5.0		30	5.4

Note.- Discharge Sept. 16-30, 1936; mean, 5.31 second-feet; per square mile, $0.1\overline{45}$ second-feet; run-off, 0.08 inch, or 158 acre-feet.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	5.0 5.0 5.0 5.2 5.4	5.0 5.0 4.8 5.0 5.0				4.0 4.0 4.6 4.6	24 28 35 30 28	127 199 188 210 199	15 15 14 13 12	8.8 8.5 7.8 6.8 6.8	7.5 8.0 7.8 6.4 6.0	3.0 3.4 3.4 3.0 3.0
6 7 8 9 10	5.4 5.2 5.0 5.0	5.0 5.0 5.0 4.6 4.0				4.6 4.6 4.6 5.0	21 23 24 32 38	188 157 137 127 117	12 11 11 11 15	6.6 6.8 7.2 7.0 7.0	6.0 6.0 6.0 5.6 4.6	3.0 3.0 3.0 3.0 3.4
11 12 13 14 15	5.0 5.0 5.0 5.0	4.2 4.6 4.6 4.2 4.8				5.4 5.8 5.0 5.4 6.2	43 52 157 221 232	112 107 79 92 84	16 13 11 11 10	7.8 8.0 7.8 7.2 7.8	4.6 4.6 4.4 4.4	3.4 3.2 3.4 3.4 3.4
16 17 18 19 20	5.2 5.4 5.0 5.2	4.8 5.0 4.2 3.4 5.0				6.4 6.6 7.0 7.0	199 167 167 177 188	74 62 58 52 49	11 13 11 14 19	7.5 7.2 7.8 7.2 7.5	4.0 4.0 4.0 4.0	3.4 3.4 3.0 3.0 3.0
21 22 23 24 25	5.4 5.2 5.4 5.4	5.0 5.0 4.6 4.6				7.0 7.0 7.0 7.2 7.5	177 147 137 137 127	43 38 35 30 28	17 15 14 13 12	7.0 7.2 6.8 6.6 6.6	4.0 5.4 2.8 2.8 2.8	3.0 3.4 3.6 3.2
26 27 28 29 30 31	5.4 5.0 4.6 4.2 4.2 5.0	4.6 4.4 4.2 4.2				7.2 12 13 14 16 18	177 210 210 177 147	27 24 22 20 19 18	12 11 8.0 9.0 8.8	6.8 6.8 5.6 7.5 7.8 7.5	2.8 2.8 2.8 2.8 3.0 3.0	3.0 3.0 3.4 3.4

						••	7.0
Month	Second-	Maximum	Minimum	Mean	Per	Ru	n-off
Honen	foot-days	Heximum	TITITEMUM	nean	mile	Inches	Acre-feet
October	157.8	5.4	4.2	5.09	0.139	0.16	313
November	138.8	5.0	3.4	4.63	.127	.14	275
December	124			4	.110	.13	246
Calendar year							
Jamuary	93	_	_	3	.082	.09	184
February	84	_	_	3	.082	.09	167
March	222.3	18	4.0	7.17	.196	23	441
April	3.532	232	21	118	3.23	3.60	7,010
May	2,722	210	18	87.8	2.41	2.78	5.400
June	377.8	19	8.0	12.6	.345		749
						.38	
July	225.3	8.8	5.6	7.27	.199	.23	447
August	139.3	8.0	2.8	4.49	.123	.14	276
September	95.8	3.6	3.0	3.19	.087	.10	190
Water year 1936-37	7,912.1	232	-	21.7	•595	8.07	15,700

Weiser River near Starkey, Idaho

Location.- Staff gage, 44°51', long. 116°23', SE1 sec. 31, T. 18 N., R. 1 E., 1,000 feet upstream from mouth of East Fork of Weiser River, 31 miles east of Starkey.

Drainage area .- 66.6 square miles.

Records available .- April to September 1937.

Extremes. - Maximum discharge observed, 400 second-feet Apr. 15 (estimated); minimum, 7.8 second-feet Aug. 18, 24, 27-29 (gage height, 0.47 foot).

Remarks.- Records good. Discharge for periods of missing gage heights, April 13-15, 17-19 computed on basis of records for other stations in Weiser River Basin; that for Sept. 1-10 interpolated. No diversions or regulation. Bureau of Reclamation furnished results of nine discharge measurements.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

6.0	1.8	101
11.5	2.0	135
19.5	2.2	177
29	2.4	230
41	2.6	290
56	2.5	360
75	3.0	440
	11.5 19.5 29 41 56	11.5 2.0 19.5 2.2 29 2.4 41 2.6 56 2.8

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5								245 290 342 380 380	32 30 29 28 26	18 17 16 16 15	12 13 12 11 11	8.6 8.6 8.7 8.7 8.8
6 7 8 9							1111	325 275 245 216 216	26 24 23 26 37	13 15 16 16 15	10 10 10 9.4 9.7	8.8 8.9 8.9 9.0 9.0
11 12 13 14 15							- 87 225 375 400	202 190 177 177 155	32 27 24 24 22	15 16 15 15 15	9.7 9.1 9.1 8.5 8.2	9.1 8.2 8.8 8.8 8.0
16 17 18 19 20							342 300 275 275 308	135 126 117 101 87	28 29 27 28 36	14 14 14 13 13	8.2 8.0 8.0 8.0	8.2 8.2 8.5 8.5
21 22 23 24 25							290 245 216 202 230	81 70 65 57 55	34 30 28 26 24	12 12 12 12 11	8.2 8.2 8.0 7.8 8.5	9.4 9.7 9.4 9.1 9.1
26 27 28 29 30 31							308 380 342 275 230	51 47 44 41 38 36	23 22 19 19 19	14 13 13 9.7 10	8.2 8.0 8.0 8.2 8.5	9.1 9.7 9.7 9.7 9.7

Month	Second-	Maximum	Minimum		Per	Ru	n-off
ronth	foot-days naximum		rinimum	Mean	square mile	Inches	Acre-feet
October November December							
Calendar year							
January February March. April 12-30 May June July August September.	5,305 4,966 802 429.7 283.1 267.1	- 400 380 37 18 13	- - 87 36 19 9.7 7.8	279 160 26.7 13.9 9.13 8.90	4.19 2.40 .401 .209 .137	2.96 2.77 .45 .24 .16	10,520 9,850 1,590 852 562 530
The period							23,900

Weiser River near Council, Idaho

Location.- Staff gage, lat. 44°41', long. 116°29', in sec. 29, T. 16 N., R. 1 W., 0.7 mile downstream from junction of Cottonwood Creek with Weiser River, 2 miles upstream from Middle Fork of Weiser River, and 3½ miles southwest from Council.

Drainage area. - 390 square miles.

Records available .- April to September 1937.

Extremes. Maximum discharge during period of record, 1,550 second-feet Apr. 15, (gage height, 4.50 feet), from rating curve extended above 1,100 second-feet; minimum, 32 second-feet July 6 (gage height, 0.50 foot).

Remarks. - Records good. Discharge for periods of missing gage heights, Apr. 13, 14,
17, based on comparison with records for other stations in Weiser River Basin. Gage
read twice daily April 20 to Sept. 30; once daily at other times. Flow regulated by
storage in Lost Valley Reservoir. Numerous diversions upstream from Weiser River and
its tributaries. Bureau of Reclamation furnished results of 10 discharge measurements.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.5	32	2.0	425	3.5	1,085
.8	67	2.3	545	3.8	1.220
1.1	124	2.6	680	4.1	1,355
1.4	200	2.9	815	4.4	1,500
1.7	305	3.2	950	4.6	1,600

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5							1111	725 950 995 1,130 1,130	206 209 203 183 154	64 53 41 37 35	61 60 57 56 53	59 59 59 59 64
6 7 8 9 10								995 905. 815 770 770	142 131 124 164 248	41 59 59 53 53	53 53 59 57 56	61 59 56 56
11 12 13 14 15							545 600 1,000 1,550	680 635 635 680 635	230 200 183 167 160	51 51 51 53 49	53 49 49 48 46	54 54 56 56 56
16 17 18 19 20							1,360 1,000 905 905 950	590 545 545 525 465	172 186 178 194 227	51 49 56 59 57	46 45 43 45 53	54 53 53 53 56
21 22 23 24 25							905 815 680 635 635	445 425 385 365 365	200 203 180 154 140	56 56 56 56 59	52 53 61 61 61	59 59 59 60 61
26 27 28 29 30 31							860 995 950 770 680	345 345 325 285 248 221	133 118 101 82 76	63 59 59 59 56 54	61 59 57 57 59 59	59 59 59 59 57

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
Calendar year					
January. February March. April 12-30 May. June July August September.	16,740 18,874 5,048 1,655	1,550 1,130 248 64 61	- - 545 221 76 35 43 53	881 609 168 53.4 54.3 57.5	33,200 37,440 10,010 3,280 3,340 3,420
The period					90,690

Weiser River above Crane Creek, near Weiser, Idaho

Location. - Water-stage recorder, lat. 44°18', long. 116°48', in sec. 10, T. 11 N., R. 4 W., 1 mile above mouth of Crane Creek, and 9 miles northeast of Weiser.

Drainage area. - 1,160 square miles.

Records available .- July 1920 to September 1937.

Average discharge. - 16 years (1921-37), 755 second-feet.

Extremes.- Maximum discharge during year, 5,380 second-feet Mar. 18 (gage height, 5.90 feet); minimum, 9 second-feet Aug. 22-27 (gage height, 0.89 foot). 1920-37: Maximum discharge, about 14,000 second-feet Mar. 19, 1932 (gage height, about 10.8 feet, from high-water marks); minimum (estimated), 5 second-feet Aug. 11 to Sept. 10, 1931.

Remarks.- Records good except those for periods of ice effect, Nov. 25 to Dec. 1,

Dec. 9-16, 20-22, 26-31, Jan. 1 to Mar. 11, which were computed on basis of two
discharge measurements, weather records, and records for stations on nearby streams.
Of the records for these periods, those for Jan. 1 to Mar. 11 are poor and the others
are fair. Discharge for July 13-17, 19-23, 26-28, Sept. 3, 4, 6-11 interpolated.
Numerous diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.60	4.5	3.40	1,520
1.00	47	3,80	1,980
1.40	138	4,20	2,500
1.80	286	4.60	3,100
2.20	495	5.00	3,770
2.60	765	5.40	4,480
3 00	1 115		

Day	Oct.	How.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	33 36 35 32 32	64 64 70 62 58	80 86 96 96 94			200 250 300 350 400	2,360 3,680 2,230 1,600 1,540	1,230 1,430 1,740 2,040 2,230	821 789 797 750 669	194 157 124 106 101	33 36 41 44 41	10 10 12 13 15
6 7 8 9 10	32 33 36 39 41	68 74 74 68 70	96 96 98 95 95			450 500 550 600 700	2,430 2,160 1,560 1,510 1,680	2,040 1,920 1,740 1,680 1,630	588 513 450 422 555	86 70 60 70 56	35 29 25 20 23	18 21 24 27 30
11 12 13 14 15	42 54 62 66 70	68 84 91 89 84	90 90 85 90 100			900 1,100 1,550 2,300 2,720	1,510 1,330 1,360 2,500 3,340	1,590 1,520 1,490 1,610 1,630	705 614 555 507 473	26 23 22 22 21	19 17 16 15 13	33 36 38 35 35
16 17 18 19 20	76 78 76 72 72	82 86 86 84 82	105 103 103 94 95			3,770 3,680 4,480 2,300 1,630	3,020 2,300 1,920 1,740 1,680	1,580 1,560 1,560 1,610 1,540	461 495 489 562 648	20 20 19 20 22	12 12 12 12 12	35 32 30 29 35
21 22 23 24 25	72 72 70 66 62	78 80 76 78 80	100 100 103 103 103			1,630 1,560 1,680 1,550 1,620	1,630 1,520 1,340 1,170 1,090	1,430 1,420 1,440 1,330 1,300	789 676 614 543 484	24 26 28 29 25	11 9 9 9	44 54 56 56 58
26 27 28 29 30 31	58 58 62 64 66 66	80 80 80 80 80	100 100 100 90 90			1,620 1,590 1,540 1,500 1,350 1,290	1,210 1,590 1,740 1,520 1,290	1,400 1,320 1,280 1,170 1,020 896	422 379 310 269 224	26 27 28 29 29 29	9 10 10 10 10	64 72 76 70 72 -

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,733 2,300 2,966	78 91 105	32 58 80	55.9 76.7 95.7	3,440 4,560 5,880
Calendar year 1936	295,305	5,530	14	807	585,700
January February March April May June June June June June June June June	3,100 4,200 45,660 55,550 47,376 16,573 1,539 573 1,140	4,480 3,680 2,230 821 194 44 76	200 1,090 896 224 19 9	100 150 1,473 1,852 1,528 552 49.6 18.5 38.0	6,150 8,330 90,570 110,200 93,970 32,870 3,050 1,140 2,260
Water year 1936-37	182,700	4,480	9	501	362,400

East Fork of Weiser River near Council. Idaho

Location.- Water-stage recorder, lat. 44°46', long. 116°16', in SE½ sec. 31, T. 17 N., R. 2 E., three-quarters of a mile southwest of Squaw Creek ranger station and 9 miles northeast of Council. Zero of gage is 6,224.1 feet above mean sea level.

Drainage area.- 2.0 square miles. (revised).

Records available. September 1932 to November 1934, April to October 1935, September 1936 to September 1937.

Extremes.- Maximum discharge during water year 1936-37, 49 second-feet June 8 (gage height, 3.25 feet); no flow April 8 (observation by field engineer).

1933-35, 1937: Maximum discharge, 75 second-feet June 9, 1933: maximum gage height, 4.11 feet June 9, 1933 (to affected); no flow Apr. 8, 1937.

Remarks.- Records good except those for Oct. 1-7, 1935 (interpolated), which are fair, and those for period of ice effect, Nov. 2 to Dec. 5, 1938 (estimated on basis of discharge for Nov. 1 and engineer's field estimate on Dec. 5), and for period of missing gage heights, May 1-13, 1937 (estimated on basis of records for Johnson Creek at Yellow Fine), which are poor. Discharge Oct. 23-26, 1936, and June 24, 25, 1937, interpolated. No regulation or diversions above station. Results of three discharge measurements furnished by U. S. Bureau of Reclamation.

Rating table, September 1936 to September 1937 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 15 to Nov. 1, 1936)

0.9	0	1.7	6.0	2.5	24
1.1	0.13	1.9	10	2.7	30
1.3	.65	2,1	14	3.0	40
1.5	2.7	2.3	19	3.3	57

Daily discharge Oct. 1-8, 1935, 0.5 second-foot; per square mile, 0.250 second-foot. Run-off for the period 0.07 inch, or 8 acre-feet.

Daily discharge Sept. 15-30, 1936, 0.5 second-foot; per square mile, 0.250 second-foot. Run-off for the period, 0.15 inch, or 16 acre-feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul y	Aug.	Sept.
1 2 3 4 5	0.4 .4 .4 .4	0.4	} 0.4					1 1 2 2	23 26 28 26 23	8.0 7.4 6.8 6.4 6.4	1.6 1.5 1.4 1.4	0.7 .7 .7 .9
6 7 8 9	.3 .3 .3 .3		-				*0	2 3 4 4	22 22 25 28 28	5.8 5.8 5.3 4.4 4.2	1.2 1.2 1.2 1.2	.6 .6 .6
11 12 13 14 15	.3 .3 .3		-					5 6 7 8.2 8.4	23 22 20 20 20	3.9 4.0 3.8 3.3 2.7	1.2 1.1 1.1 1.1 1.1	.6 .6 .6
16 17 18 19 20	.3 .3 .4	.4	-					10 12 14 14 14	20 17 16 18 22	2.6 2.3 2.2 2.2 2.2	.9 .9 .8 .7	.6 .5 .6
21 22 23 24 25	.4 .5 .5 .5		-					16 20 20 21 25	20 19 16 15	2.1 2.1 2.1 2.0 2.0	.7 .7 .7 .7	.6 .6 .6
26 27 28 29 30 31	.5 .6 .6 .4		-					26 28 28 24 21 22	12 11 10 9.4 8.6	2.7 2.0 1.9 1.7 1.6	.6 .6 .6 .7	.6 .6 .6

31 .4				22	- 1	.6	.6]
Month	Second-	Meximum	Minimum		Per	Ru	n-off
Month	foot-days	riaximum	Filnimum	Mean	square mile	Inches	Acre-feet
October	12.1 12.0 2.1	0.6	0.3	0.39 .40 .42	0.195 .200 .210	0.22 .22 .04	24 24 4
Calendar year							
January. February. March. April. Hay. June. July. August. September.	372.6 582.0 111.5 30.2 18.7	28 28 8.0 1.6	1 8.6 1.6 .6	12.0 19.4 3.60 .97	6.00 9.70 1.80 .485	6.92 10.82 2.08 .56 .35	739 1,150 221 60 37
Water year							

^{*}Observation by field engineer.

East Fork of Weiser River near Starkey, Idaho

Location.- Staff gage, lat. $44^{\circ}51^{\circ}$, long. $116^{\circ}23^{\circ}$, in SE½ sec. 31, T. 18 N., R. 1 E., 500 feet above confluence with Weiser River and 32° miles east of Starkey.

Drainage area .- 31.6 square miles.

Records available .- April to September 1937.

Extremes. Maximum discharge observed during period, 146 second-feet May 5 (gage height, 1.37 feet); minimum, 1.4 second-feet Sept. 16 (gage height, 0.28 foot).

Remarks. - Records good except those for periods of missing gage heights Apr. 13, 14, 16-19 which were computed on basis of records for other stations in Weiser River Basin, and are fair. Discharge Sept. 1-10 interpolated. Gage read once daily Apr. 12-22; twice daily April 23 to September 30. Diversions for irrigation above station. Bureau of Reclamation furnished results of 11 discharge measurements.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used April 28 to May 8)

0.2 0.75 .4 3.5 .6 12 .8 30 1.0 61 1.2 107 1.4 169

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5							11111	56 82 116 133 143	45 49 49 33 28	8.5 5.6 4.9 4.9 4.6	2.1 1.9 1.9 1.7	1.9 1.9 1.9 2.0 2.0
6 7 8 9 10							-	133 119 113 113 110	23 21 22 38 45	4.2 4.2 3.8 3.1 2.3	1.7 1.9 1.7 1.7	2.0 2.0 2.1 2.1 2.1
11 12 13 14 15							25 50 75 107	113 107 110 124 113	33 27 24 22 21	2.1 2.3 2.3 2.3 2.3	1.9 1.9 1.9 1.9	2.1 1.9 2.1 2.1 1.7
16 17 18 19 20							85 70 70 75 74	107 104 102 100 87	24 22 20 22 34	2.1 2.1 2.1 2.1 2.1	1.9 1.7 1.5 1.7	1.4 1.5 1.5 1.5
21 22 25 24 25			į				61 50 44 41 44	78 76 76 72 82	27 25 18 18 16	2.1 2.1 2.1 2.1 2.1	1.5 1.7 1.7 1.7	1.9 1.7 1.7 1.5 1.5
26 27 28 29 30 31							69 90 76 58 49	69 69 61 50 49	14 14 12 9.5 9.0	4.2 3.3 2.5 2.1 2.1 1.9	1.9 1.7 1.7 1.7	1.9 1.9 1.9 1.9

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
Getober November December					
Calendar year					
January February March	-			-	-
April 12-30	1,213 2,936	107 143	25 49	63.8 94.7	2,410 5,820
JuneJulyAugust	764.5 94.5 55.1	49 8.5 2.1	9.0 1.9 1.5	25.5 3.05 1.78	1,520 187 109
September	55.5	2.1	1.4	1.85	110
The period					10,160

West Fork of Weiser River near Fruitvale, Idaho

Location.- Staff gage, lat. $44^{\circ}50^{\circ}$, long. $116^{\circ}28^{\circ}$, in $NW_{\frac{1}{2}}$ sec. 9, T. 17 N., R. 1 W., at Taylor ranch (formerly Caseman), $1\frac{1}{2}$ miles northwest of Fruitvale, Adams County, and $1\frac{1}{2}$ miles above confluence with Weiser River.

Drainage area. - 78 square miles, (revised).

Records available. - October 1910 to January 1913; October 1919 to September 1925; April to September 1937.

Extremes.- Maximum discharge recorded during period, 276 second-feet Apt. 15 (gage height, 2.14 feet); minimum, 7 second-feet July 6 (gage height, 0.13 foot). 1910-13, 1919-1925, 1937: Maximum discharge observed, 688 second-feet Apr. 19, 1925; minimum, 0.5 second-foot July 23-27, 1911.

Remarks.- Records good except those for period of missing gage heights, Apr. 12-14, and those for July 6, when stage changed rapidly, which are fair. Discharge for Apr. 10, 12-14, 17, 19 computed on basis of records for other stations in Weiser River Basin. Gage read once daily Apr. 9-19, twice daily Apr. 20 to Sept. 30. Several irrigation diversions above and below station. Flow regulated at Lost Valley Reservoir, 12 miles upstream. Bureau of Reclamation furnished results of 10 discharge measurements.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.1	5.5	1.3	116
.3	14.5	1.5	149
•5	27	1.7	186
.7	44.5	1.9	225
.9	66	2.1	266
1.1	89	2.2	287

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5							1111	186 215 235 256 235	17 16 16 15 14	13 12 10 10 8	62 59 59 56 51	59 59 59 59
6 7 8 9 10							102 100	215 196 176 176 149	16 16 16 24 33	25 44 47 47 47	53 55 53 52 47	59 59 57 56 55
11 12 13 14 14							96 125 175 225 276	102 102 89 89 83	32 26 26 26 26	46 44 47 49 49	44 44 44 44	57 55 55 53 53
16 17 18 19 20				,			215 180 176 180 176	70 73 60 55 48	27 26 27 30 33	47 44 53 59 62	44 44 44 44 55	52 52 51 49 5 1
21 22 25 24 25							167 149 124 116 124	41 36 33 30 28	33 32 32 27 26	56 57 55 57 57	55 55 59 64 62	51 51 53 53 55
26 27 28 29 30 31							158 205 186 149 158	24 21 18 17 17	26 23 15 14 14	62 59 57 57 57	63 62 62 62 62 62	55 53 53 53 52

Konth	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
Calendar year					
January	-	-	-	-	-
February	:		_		-
April 9-30	3,562	276	96	162	7,070
MayJune	3,092 704	256 33	17 14	99.7 23.5	6,130 1,400
JulyAugust	1,397 1.666	62 64	8 44	45.1 53.7	2,770 3,300
September	1,638	59	49	54.6	3,250
The period	-				23,920

Lost Valley Reservoir near Tamarack, Idaho

Location.- Staff gage, lat. 44°57'30", long. 116°28', in sec. 28, T. 19 N., R. 1 W., a short distance above outlet gates near left end of dam, 4 miles west of Tamarack, and 16 miles north of Council.

Drainage area. - 29.4 square miles (revised).

Records available .- May to September 1924, May 1926 to September 1937.

Extremes. Maximum stage observed during year, 25.60 feet June 12; minimum, 2.70 feet 0ct. 27. 1924, 1926-37: Maximum stage, 25.60 feet June 12, 1937; gage not read when reservoir was nearly empty.

Remarks. - Stored water from this reservoir used for irrigation in Weiser Valley. Elevation of permanent spillway crest referred to present datum (which is 1.40 feet lower than datum used in 1924) is 22.26 feet; installation of temporary flashboards increases elevation of spillway crest to about 25.14 feet on gage. Prior to October 1929 elevation of spillway crest was 17.80 feet, present datum. Gage-height record furnished by owners of Lost Valley Reservoir.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.
1 2 3	_	_	-				_	_	25.40	_	_	_
2	-	-	-			ļ	-	-	_	-	-	- 1
3	-	-	-				-	-	-	-	-	- 1
4	-	-					- 1	17.55	-	-	-	-
5	-	-	5.76			i	-	-	-	25.45	-	-
6	-	-	-				10.42	_	_	_	20.56	- 1
7	-	3.36	-				-	-		-	-	-
8	9.10	- 1	-				-	-	26.54	-	-	- 1
9	-	- 1	- 1				-		25.54	-	20.02	I
10	-	-	-			1	-	19.90	-	-	-	14.03
11 12 13	-	-	-				-	-	-	-	-	-
12	-	-	-		İ		- 1	20.80	25.60	24.52	-	- 1
13		-	-					21.26	-	-	-	- 1
14	7.31	-	-		ľ	1	-		-	-	19.30	- 1
15	-	-	-		Ì		- 1	22.02	-	-	-	- 1
16	-	-	-				11.34	-	-	-	-	-
17	-	-	-		l		-	22.75	25.56	23.06	-	-
18	-	-	-		i		-	-	-	-	18.67	- 1
19	- '	-	-		1	ł .			25.55		18.52	- 1
20	-	-	-		İ		12,60	23.68	-	23.36	-	-
21 22 23	4.10	-	-				-	-	-	-	_	-
22	-	-	-			1	-	24.25	-	-	18.00	-
23	-	:	-		Į.	l	1	·	-	l -		11.36
24 25		-	- :			1	-	24.48		-	-	- 1
1	2.80	-	-				-	-	25.58	-	-	-
26 27 28 29 30	-	-	_				14.44	24.97	25.55	22.38	17.10	-
27	2.70	-	-	ļ.	1		-		25.54	-	-	-
28	-	- '	- '	ľ	1	ì	-	i -	- '	۱ -	۱ -	1 - 1
59	-	- :	-	i	1	I		!	-	-	-	-
31	-	-	-		I	I	16.01	25.26 25:36	- '	1 -	-	-
1 27	-	-	-				-	25:36				

Lost Creek near Tamarack, Idaho

Location. - Water-stage recorder, lat. 44°57', long. 116°28', in sec. 28, T. 19 N., R. 1
W., a quarter of a mile below dam of Lost Valley Reservoir, 4 miles west of Tamarack, and 16 miles north of Council.

Drainage area. - 29.4 square miles (revised).

Records available.- January 1910 to August 1914, May 1920 to September 1921, May 1924 to September 1937.

Extremes. - Maximum discharge during year, 72 second-feet May 10 (gage height, 1.99 feet);

Minimum, less than half a second-foot Dec. 6 to Feb. 20.

1910-14, 1920-21, 1924-37: Maximum discharge, 688 second-feet May 17, 18, 1921

(gage height, 4.29 feet); practically no flow at times when gates in dam were closed.

Remarks.- Records good, except those for period of ice effect or missing gage heights Dec. 5 to Apr. 5 (computed on basis of reported gate changes) and those below two second-feet which are fair. No diversions between gage and reservoir; practically entire flow diverted below station during irrigation season. Flow regulated by operation of head gates at dam above. Gage-height record furnished by owners of Lost Valley Reservoir.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	25 25 24 24 24	6 4 4 5 5	1 1 1 1		0000	6 6 6 6	6 6 6 6	62 64 64 66 68	8 9 9 9	11 11 10 9 24	54 54 54 53 53	53 53 52 52 52 52
6 7 8 9 10	24 24 34 54 53	3 1 1 1	0000		0 0 0 0	6 6 6	6 6 6	66 68 69 69 38	10 11 13 19 23	47 46 46 46 45	53 53 52 46 40	52 50 50 49 50
11 12 13 14 15	52 50 49 47 45	1 1 1 1	0 0 0 0		0 0 0	6 6 6 6	6 6 6	8 5 3 3 3	23 23 23 21 19	44 44 44 44	40 40 40 41 42	52 52 50 49 49
16 17 18 19 20	44 42 40 38 33	1 1 1 1	0 0 0		0000	6 6 6	6 7 7 7	4 9 3 3 3	18 18 19 19 23	44 48 54 54 56	42 42 42 47 50	49 48 48 47 47
21 22 23 24 25	24 10 6 6	1 1 1 1	00000		3 6 6 6	6 6 6	7 7 7 7	3 3 4 6 3	23 23 21 20 21	56 56 57 57	49 56 60 61 60	45 44 46 48 47
26 27 28 29 50 31	5 5 5 6 7	1 1 1 1	0 0 0 0 0		6 6 6 1 1 1	6 6 6 6	19 26 28 28 47	3 3 3 4 7	21 17 15 14 13	57 57 57 56 53 53	57 56 54 54 53 53	45 45 42 41 40

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	836 51 5	54 6 1	5 1 0	27.0 1.7 .2	1,660 101 10
Calendar year 1936	11,445	212	-	31.3	22,700
January February Barch April May Jun Jun Jun Jun Jun Jun Jun Jun Jun Jun	0 45 185 308 722 514 1,386 1,551	0 6 6 47 69 23 57 61 53	0 6 6 3 5 9 40	0 1.6 6.0 10.3 23.3 17.1 44.7 50.0 48.2	0 89 369 611 1,430 1,020 2,750 3,080 2,870
Water year 1936-37	7,051	69	-	19.3	13,990

Hornet Creek near Council, Idaho

Location.- Staff gage, lat. 44°45', long. 116°29', in sec. 5, T. 16 N., R. 1 W., Adams County, 2½ miles above confluence of Hornet Creek with Weiser River, 2.5 miles northwest of Council.

Drainage area. - 107 square miles.

Records available .- April to September 1937 (incomplete).

Extremes.- Maximum discharge observed, 134 second-feet May 27 (gage height, 2.10 feet); practically no flow after early summer.

 $\frac{\text{Remarks.-}}{\text{Reclamation furnished gage height record and results of nine discharge measurements.}}$

Rating table, 1937 (gage height, in feet, and discharge, in second-feet)

0.1	0	1.3	37
.3	.4	1.5	58
.5	2.0	1.7	si
•7	6	1.9	106
.9	12.5	2.1	134
1.1	22.5		

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5							-	100 106 116 120	32 30 28 23			
6 7 8 9							-	114 101 94 96 97 94	19 17 16 32 48 47			
11 12 13 14 15							1111	91 89 86 91 86				
16 17 18 19 20							1 1 1 1	81 82 83 76 77	1111		0	
21 22 23 24 25							- 119 111 103	65 71 68 66 67	11111	0.1		
26 27 28 29 50 51							118 134 120 105 102	58 48 60 52 43 31	26 25 -	•		

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October November December					
Calendar year					
January		-	-	=	=
March. April 23-3D May	912	134 120	102 31	114 80.9	1,810 4,980
June 1-10	292	48	16	29.2	579
AugustSeptember	-	-	_		=
Water year					

Middle Fork of Weiser River near Mesa, Idaho

Location.- Staff gage, lat. 44°39', long. 116°27', in NW½ sec. 10, T. 15 N., R. 1 W., old highway bridge, 1% miles(revised) north of Mesa, Adams County, and 2½ miles (revised) above confluence with Weiser River.

Drainage area. - 86.5 square miles.

Records available.- August 1919 to November 1921, April to September 1937. October 1910 to August 1913, at site three-quarters of a mile upstream.

Extremes. - Maximum discharge observed during period, 403 second-feet May 4 (gage height, 2.80 feet); no flow Aug. 12, Aug. 15 to Sept. 24.
1919-21, 1937: Maximum discharge observed, 1,070 second-feet May 20-22, 1921; no flow Aug. 12, Aug. 15 to Sept. 24, 1937.

Remarks.- Records good except those for periods of missing gage heights Apr. 13, 14, 17, which were computed on basis of records for other stations in Weiser River Basin and are fair. Gage read once daily Apr. 11-19; twice daily Apr. 20 to Sept. 30. Mesa Orchards Canal diverts about 6\$ miles upstream. Bureau of Reclamation furnished results of 10 discharge measurements.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used April 11 to May 5)

0.5	0	1.7	137
.7	2.0	1.9	190
.9	14.5	2.1	252
1,1	37	2.3	318
1.3	64	2.6	420

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 5 4 5							-	168 302 318 403 369	190 196 199 162 144	42 37 33 27 24	0.8 .5 .5 .5	0 0 0 0
6 7 8 9 10							- - - -	335 318 318 318 302	130 124 119 142 168	21 19 17 14 11	.4 .3 .3 .2	0 0 0 0
11 12 13 14 15							78 73 125 225 285	318 318 335 369 352	133 124 111 104 98	9.7 8.1 6.5 7.3 6.5	.1 0 .4 .2	0 0 0 0
16 17 18 19 20							190 160 150 142 142	352 335 335 352 302	117 102 93 93 160	5.6 4.7 2.9 1.8 1.7	0 0 0 0	0 0 0 0
21 22 23 24 25							137 113 93 82 98	318 335 302 268 318	126 115 100 89 79	1.4 1.2 .8 .6	0 0 0 0	0 0 0 0 8.1
26 27 28 29 30 31							182 220 187 147 137	302 302 302 252 217 196	73 68 67 56 47	1.8 1.1 1.1 .6 .4	0 0 0 0	5.6 5.6 2.9 1.7 1.7

Month	Second- foot-days	Maximum	Minimu	Mean	Rum-off in acre-feet
October					
Calendar year					
January	-	-		-	=
MarchApril 11-30	2,966	285	73	148	5,880
May	9,631 3,529	403 199	168 47	311 118	19,100 7,000
July	309.7 4.5 25.6	42 .8 5.1	0	9.99 .15 .85	614 9.5 51
Water year					32,650

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Mesa Orchards Canal near Mesa, Idaho

Location.- Staff gage, lat. 44°38', long. 116°25', in sec. 14, T. 15 N., R. 1 W., 1,700 feet above end of flume, 1-1/2 miles northeast of Mesa, and 3 miles below head gates.

Records available. - 1924, 1928, 1930-37 (irrigation seasons only).

Extremes. Maximum discharge observed during year, 33 second-feet July 14-16; maximum gage height, 2.78 feet July 14, 15; no flow at times.

1924, 1928, 1930-37: Maximum discharge, 36 second-feet June 8-10, 1935; no flow during nonirrigation season.

Remarks.- Records good. Discharge for Apr. 23, 27, May 9 computed on basis of reported gate changes, that for June 28-28 and Sept. 25-30 on basis of information furnished by watermaster for Weiser River. Canal diverts water from Middle Fork of Weiser River in SE\high with sec. 9, T. 15 N., R. 1 E., for irrigation of Mesa Orchards and for domestic supply of village of Mesa. Flow regulated by operation of gates in diversion dam and by waste gates in flume above gage. Gage-height record furnished by operators of Mesa Orchards.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	7 7 7 *7		†0				0 0 0	0 0 0	27 28 31 31 27	26 28 29 29 30	24 23 23 21 20	14 14 13 12 17
6 7 8 9 10	7 7 6 6	:					0 0 0	0 0 0 8 17	*27 27 27 27 27 28	31 31 30 32 32	20 20 *18 17 18	15 14 14 14 13
11 12 13 14 15	*5 *5 4 *4 *3						0000	12 18 24 22 22	27 31 *31 31 29	*32 32 32 33 33	19 17 16 17 16	12 *12 12 13 11
16 17 18 19 20	3 *3 *2 2 *2		, 1 0				0 0 0	*22 23 19 19 19	31 31 25 23 *20	33 32 *31 30 30	16 15 16 16 16	11 10 11 *10 10
21 22 .23 24 25	*2 *3 *3 *3 *3						0 0 2 6 8	14 19 *20 20 23	17 16 14 13 12	29 29 28 26 *26	14 14 13 16 14	*11 12 12 12 12
26 27 28 29 30 31	3 *3 *4 4 5 5					+0	12 4 0 0 0	23 23 23 22 *22 *23	4 0 9 15 22	27 *26 24 23 22 21	14 13 14 13 14 15	6 6 10 11 11

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	138	7	2	4.4	274
Calendar year					
January. February March. April May June July September September	32 457 681 897	12 24 31 33 24 17	0 0 0 21 13 4	1.1 14.7 22.7 28.9 16.8 11.6	63 906 1,350 1,780 1,040 688
Water year					

^{*}Interpolated. †Observation by engineer.

Crane Creek Reservoir near Midvale, Idaho

Location.- Staff gage, lat. $44^{\circ}22^{\circ}$, long. $116^{\circ}37^{\circ}$, in SE‡ sec. 19, T. 12 N., R. 2 W., 10 miles southeast of Midvale.

Drainage area .- 242 square miles (revised).

Records available .- November 1923 to September 1937.

Extremes. - Maximum stage observed during year, 45.6 feet May 1, 3, 5-8; minimum, 25.8 feet Sept. 30. 1924-37: Maximum stage, 56.3 feet Feb. 22, 1927; no usable storage Sept. 23, 1928, to Feb. 28, 1929, and Sept. 25 to about Dec. 1, 1929.

Remarks. - Capacity of reservoir is reported to be about 60,000 acre-feet at gage-height 55 feet. Water is used for irrigation in lower Weiser Valley. Gage-height record furnished by Crane Creek Reservoir Administration Board.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32.15	-	-	-	-	-	41.60	45.60	44.95	44.10	-	30.90
2	-	-	-	31.00	_	-	42.00	-	44.90	44.10	38.30	30.60
3	32.10	31.80	-	-	-	_	42.40	45.60	44.90	44.05	38.10	30.40
4	32.00	31.80	-	-	-	-	42.50	-	44.85	-	38.00	30.20
5	-	31.00	31.80	-	-	-	42.65	45.60	44.00	43.80	37.90	- 1
6	-	31.75	31.72	_	31.90	32.60	43.00	45.60	_	43.60	37.75	29.65
7	-	-	31.80	-	_	-	-	45.60	44.75	43.40	37.60	29.40
8	-	-	-	-	-	-	43.60	45.60	-	43.20		29.15
9	-	-	-	31.60	-	-	43.80		44.70	43.00	37.20	28.90
10	-	31.75	-	-	-	-	44.20	45.55	44.70	42.50	37.15	28.55
11	_	31.75	-	-	_	-	_	45.55	44.70	_	37.00	28.40
12	-	-	31.80	-	-	-	44.30	45.55	44.65	42.60	36.80	- 1
13	-	31.75	-	-	31.95	33.60	44.50	45,50	-	42.20	36.40	28.10
14	32.00	31.75	-	-	-	35.10	44.75	-	44.60	-	36.20	27.90
15	-	-	-	-	-	-	44.90	45.42	44.60	41.70	-	27.82
16	-	31.70	-	31.80	-	37.40	45.20	45.40	44.60	41.50	35.70	27.65
17	-	-	-	-	-	-	45.25	45.35	_	41.30	35.50	27.45
18	-	31.70	-	-	-	39.00	-	-	44.50		35.20	27.35
19	32.00	31.70	31.85	-	-	-	45.35	45.30	44.50	40.90	34.90	- 1
20	-	31.70	-	-	31.95	39.00	45.40	45.30	44.45	-	34.70	27.00
21	-	31.70	-	_	-	-	45.45	45.25	44.45	40.40	34.38	26.85
22	-	-	-	-	-	40.20	45.45	-	44.45	40.20	-	26.70
23	31.90	-	-	31.80	- 1	-	45.50	45.20	44.40	40.02	33.70	26.50
24	31.90	31.75	-	-	-	40.50	45.50	-	-	39.80	33.40	26.40
25	-	31.75	-	-	-	- :	-	45.15	44.30	-	3 3.0 0	-
26	31.90	-	31.05	-	-	40.70	-	45.15	44.25	39.60	32.75	26.25
27	31.80	31.75	_	-	32.00	40.75	45.50	45.10	-	39.20	32.35	26.10
28	31.85	-	-	-	-	-	45.50	45.10	44.22	-	32.00	26.05
29	31.85	31.75	- 1	-	-	41.00	45.55	45.05	44.20	39.00	-	25.90
30	31.85	-	-	31.80	-	41.10	-	-	44.15	-	31.40	25.80
31	31.85	-	-	-	-	41.20	-	-	-	38.60	31.10	-

Crane Creek near Midvale, Idaho

Location.- Water-stage recorder, lat. 44°22', long. 116°37'30", in SE; sec. 19, T. 12 N., R. 2 W., 400 feet below Crane Creek Dam and 10 miles southeast of Midvale.

Drainage area. - 242 square miles (revised).

Records available. - October 1910 to April 1916, May 1924 to September 1937.

Average discharge. - 16 years (1912-15, 1924-37), 61.7 second-feet.

Extremes. Maximum discharge during year, 223 second-feet Aug. 19 (gage height, 2.03 feet); practically no flow Dec. 1 to May 4. 1910-16, 1924-37: Maximum discharge, 4,240 second-feet Dec. 3, 1910 (gage height, 8.9 feet); practically no flow at times in each year when gates in dam are closed.

marks.- Records good. Discharge for Nov. 30 computed upon basis of reported gate changes at Crane Creek dam, that for Oct. 18, 20, 21 interpolated. Flow regulated by storage in Crane Creek Reservoir. No large diversions above station. Gage-height record furnished by Crane Creek Reservoir Administration Board. Remarks .- Records good.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0 3.5 14.5 30 1.2 1.4 1.6 1.8 .4 2.0 48 216

рау	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	14 14 14 8 3	1 1 1 1 1 1						0006	16 16 16 16 17	17 17 47 93 124	120 120 118 11e 117	133 130 124 122 122
6 7 8 9 10	3 3 3 3 3	1 1 1 1						9 13 13 13 13	17 17 17 17 17	156 186 186 184 184	111 105 105 103 111	121 120 120 112 101
11 12 13 14 15	2 1 3 4 3	1 1 1 1						15 16 17 18 18	17 17 17 18 18	184 197 203 203 203	129 158 178 178 178	95 73 73 73 73
16 17 18 19 20	3 2 1 1	1 1 1 1						18 17 17 17 17	17 16 17 17 17	203 203 203 201 201	176 176 174 189 218	73 73 73 74 72
21 22 23 24 25	1 1 1 1	1 1 1 1						17 16 16 16 16	17 17 17 17 17	182 147 146 146 146	216 212 212 212 210	65 47 47 46 48
26 27 28 29 50 31	1 1 1 1	1 1 1 1						16 15 15 15 15 15	17 17 17 17 17	144 137 122 121 121 121	191 180 178 176 176 159	45 42 35 35 35

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	102 30 0	14 1 0	1 1 0	3.3 1.0 0	202 60 0
Calendar year 1936	25,199	821	0	68.8	49,980
January February Karch. April May June July August September.	0 0 0 409 507 4,730 5,004 2,399	0 0 0 18 18 203 218 133	0 0 0 0 0 16 17 103 35	0 0 0 0 13.2 16.9 153 161 80.0	0 0 0 811 1,010 9,380 9,930 4,760
Water year1936-37	13,181	218	0	36.1	26,150

Crane Creek at mouth, near Weiser, Idaho

Location. Water-stage recorder, lat. 44°18', long. 116°47', in sec. 14, T. 11 N., R. 4 W., Just below steel highway bridge at Harris ranch, a quarter of a mile above mouth, and 10 miles northeast of Weiser.

Drainage area. - 288 square miles (revised).

Records available .- July 1920 to September 1937.

Average discharge. - 16 years (1921-37), 64.8 second-feet.

Extremes.- Maximum discharge during year, 800 second-feet Apr. 1 (gage height, 5.43 feet);

minimum, 1 second-foot Oct. 11-31, Nov. 1-3, May 1-6, 9, 10.
1920-37: Maximum discharge, about 2,350 second-feet about Feb. 7, 1925 (gage height, 6.80 feet, from well-defined marks on gage); minimum, 0.2 second-foot May 26, 1931;
minimum gage height, 1.30 feet Jan. 21, 1922.

Remarks.- Records good except those for periods of ice effect, Jan. 7-31, Feb. 4-10

(Computed on basis of known gate changes, weather records, and comparison with records for stations on nearby streams), and those for periods of missing gage heights, Mar. 2-6, Apr. 3, 6-10, (computed on basis of daily staff gage readings, known gate changes, weather records, and comparison with records for stations on nearby streams), which are fair. Discharge interpolated oct. 1, Nov. 21, Aug. 14. Flow regulated by storage in Crane Creek Reservoir. Several small ditches divert water for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Get.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	10 10 10 10 6	1 1 2 3	4 4 4 4	3 3 4 4	5 5 5 5 5	7 15 20 15 15	283 67 25 15 35	1 1 1 1	5 6 6 6	11 S 6 65 85	105 105 105 104 104	120 118 113 109 110
6 7 8 9 10	3 2 2 2	4 4 4 4	4 4 4 4	4 3 3 3 3	5 4 4 4 4	20 18 18 21 28	· 110 50 20 20 35	1 2 2 1 1	6 8 8 10 14	121 152 156 156 159	101 94 94 92 93	109 108 107 102 90
11 12 13 14 15	1 1 1 1	4 4 4 4	4 4 4 4	3 3 3 4	5 5 5 5 5	58 65 171 139 115	15 12 11 14 13	2 3 3 3 3	15 17 18 16 16	162 170 160 180 175	137 154 154 156 158	90 66 64 63 64
16 17 18 19 20	1 1 1 1	4 4 4 4	4 4 4 4	4 3 3 3 3	5 5 5 5 5	187 73 167 33 32	10 8 7 6 6	3 3 6 5	16 16 16 18 19	180 182 180 178 178	156 154 154 159 204	62 60 61 62 64
21 22 23 24 25	1 1 1 1	4 4 4 4	4 4 4 3	3 3 4 4	5 5 5 5 5	37 36 47 23 18	6 5 4 4 4	5 5 6 5	20 19 18 18 18	170 130 128 129 128	196 196 198 196 192	62 46 44 44 43
26 27 28 29 30 31	1 1 1 1	4 4 4 4	3 3 3 3 3 3 3	4 5 5 4 4 4	5 5 6 - 1	16 15 13 10 9 8	4 3 4 3 2	6 6 7 6 6	17 17 16 16 15	128 124 106 105 105	178 159 158 156 156 153	44 43 37 34 31

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	79 108	10 4	1	2.5 3.6	157 214
December	117	4	3	3.8	232
Calendar year 1936	27,752	875	1	75.e	55,040
January	108	5	3	3.5	214
February	137	6	4	4.9	272
March	1,449	187	7	46.7	2,670
April	801	283	2	26.7	1,590
May	110	7	1	3.5	218
June	416	20	5	13.9	825
July	4,044	182	6	130	8,020
August	4,521	204	92	146	8,970
September	2,170	120	31	72.3	4,300
Water year 1936-37	14,060	283	1	38.5	27,880

Weiser Irrigation District Canal near Weiser, Idaho

Location.- Water-stage recorder, lat. 44°15', long. 116°51', in sec. 32, T. 11 N., R. 4 W., 3 1/4 miles below headworks of canal and 7 miles east of Weiser.

Records available .- April 1920 to September 1937.

Extremes. - Maximum discharge during year, 193 second-feet June 11 (gage height, 3.13 feet); practically no flow during winter. 1920-37: Maximum discharge, 221 second-feet July 15, 1932; maximum gage height, 3.43 feet May 5, 1926; usually no flow during nonirrigation season.

Remarks.- Records good. Discharge for Apr. 13 computed on basis of reported gate opening.

One farm lateral diverts water a quarter of a mile above gage. Canal diverts water from Weiser River in sec. 35, T. 11 N., R. 4 W., 3 1/4 miles above gage, for irrigation of about 7,000 acres included in projects of the Weiser and Weiser Bench Irrigation Districts near Weiser. Gage-height record furnished by Weiser Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	·						11111	184 187 183 171 171	181 184 188 185 185	16 76 114 125 128	118 120 124 128 129	119 116 111 108 110
6 7 8 9 10			*1.4				11111	169 163 169 171 170	185 185 187 188 191	150 167 167 176 173	124 113 111 105 104	110 110 114 124 111
11 12 13 14 15						*1.0	- 48 90 98	169 169 172 174 176	192 189 188 188 188	171 174 177 176 174	116 131 158 165 150	105 94 86 83 83
16 17 18 19 20							102 102 101 105 117	177 179 183 183 183	188 184 183 185 186	170 170 171 170 167	148 147 146 147 174	83 78 75 80 83
21 22 23 24 25						* •2	132 142 147 147 146	184 185 183 180 179	188 186 183 182 180	166 140 130 132 133	175 168 167 170 168	85 87 82 81 84
26 27 28 29 30 31	*49						150 164 174 179 184	171 186 187 185 180 180	182 174 7 9 15	137 132 126 120 116 116	166 150 149 149 149 146	86 90 92 86 86

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in
October					
Calendar year					
January February March April 15-50, May June July August September.	2,328 5,503 5,036 4,460	184 187 192 177 175	48 163 7 16 104 78	129 178 168 144 142 94.8	4,620 10,920 9,990 8,850 8,740 5,640
Water year					

*Discharge measurement.

Mann Creek near Weiser, Idaho

Location.- Staff gage, lat. 44°24', long. 116°54'. in sec. 11, T. 12 N., R. 5 W., at Richard's ranch, 12 miles above mouth, and 11 miles north northeast of Weiser.

Drainage area .- 56 square miles.

Records available.- March 1911 to September 1913, July to November 1920, and April to September 1937.

Extremes. - Maximum discharge observed during period, 200 second-feet Apr. 15 (gage height, 2.09 feet); no flow Aug. 18 to Sept. 22.
1911-13, 1920, 1937: Maximum discharge observed, 390 second-feet Apr. 29, 1912 (gage height, 4.8 feet, former datum); no flow Aug. 18 to Sept. 22, 1937.

Remarks.- Records good. Discharge for Apr. 12, 13, Aug. 16-20 interpolated. Gage read once daily Apr. 11-17, twice daily Apr. 18 to Sept. 30. Diversions for irrigation above and below station. Results of eight discharge measurements furnished by Bureau of Reclamation.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0	0	1.2	40.
.2	.1	1.4	62
.4	.7	1.6	88
.6	3.5	1.8	123
•8	10	2.0	173
1.0	22.5	2.1	203

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5								108 139 165 179 160	22 21 18 18 17	6.4 5.8 5.2 4.5 4.2	2.6 2.4 1.6 1.2	0 0 0
6 7 8 9 10							-	132 119 112 104 102	16 14 13 14 15	4.0 4.0 3.5 3.5 3.1	.6 .5 .5 .5	0 0 0
11 12 13 14 15							82 111 139 168 200	94 88 88 94 87	14 12 11 10 12	2.6 2.4 2.2 3.1 2.8	.3 .2 .2 .1	0 0 0
16 17 18 19 20							137 123 123 132 132	78 72 64 62 54	14 15 14 16 17	2.4 1.7 1.5 1.4 1.1	0 0 0 0	0 0 0
21 22 23 24 25							123 108 94 85 91	51 46 43 39 39	13 12 11 10 9.2	1.1 .8 .8 .7	0 0 0 0	0 0 .2 .3
26 27 28 29 30 31							115 137 114 94 93	38 36 33 30 29 26	8.8 8.0 7.6 7.2 7.6	1.5 1.7 1.1 .8 .7	00000	.5 .6 .7

	<u> </u>	- 20		.0 0		
Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October						
Calendar year						
JanuaryFebruary	-	-	-	-	=	
March	-	-	-	-	-	
April 11-30	2,397 2,511 397.4	200 179 22	82 26 7.2	120 81.0 13.2	4,750 4,980 788	
JulyAugust	76.1 12.0	6.4 2.6	0.6	2.45 .39	151 24	
September	3.9	.7	0	.13	7.7	
The period					10,700	

Burnt River near Hereford, Oreg.

Burnt River near Hereford, Oreg.

Location.— Water-stage recorder, lat. 44°30', long. 118°11', in SE½ sec. 21, T. 12 S., R. 37°E., at entrance to canyon, 0.7 mile below mouth of South Fork of Burnt River and 7 miles west of Hereford. Because of construction of Unity Dam by Bureau of Reclamation, water-stage recorder was removed Sept. 16, and temporary staff gage, 300 feet downstream, was read once a day Sept. 17-30.

Records available.— March 1915 to September 1916, October 1928 to September 1937 (incomplete prior to 1930).

Drainage area.— 309 square miles.

Extremes.— Maximum discharge during year, 528 second-feet Apr. 15 (gage height, 4.73 feet); minimum, 0.5 second-foot (regulated) May 22-24 (gage height, 0.70 foot).

1915-16, 1928-37: Maximum discharge, 1,510 second-feet Apr. 14, 1936 (gage height, 6.91 feet); minimum before construction of Unity Reservoir Dam, 1.6 second-feet Aug. 31, 1935 (gage height, 0.92 foot).

Remarks.— Records good except those for Sept. 5-30, which are fair, and those for period of Ice effect, Jan. 5 to Feb. 26, which were computed on basis of one discharge measurement, gage heights, and weather records and are poor. Many small diversions for irrigation in basin above. Some regulation from reservoir (capacity, about 700 acre-feet) on South Fork of Burnt River, 3 miles above mouth; no regulation from Unity Reservoir except for a small amount of water stored during construction of Unity Dam.

Rating tables, water year 1936-37 except for period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting control method used Sept. 5-16)

Oct. 1	to Sept. 16	Sept.	17 - 30
0.8	1.0	3.0	119
1.0	2.0	3.5	195
1.2	3.7	4.0	309
1.4	5.9	4.5	449
1.6	9.5	1.0	1.0
1.9	20	1.2	3.3
2.2	36	1.4	8.0

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	5.9 4.6 5.4 5.8 5.8	17 13 11 20 22	11 12 17 18 18	17 16 14 15 13	27 28 28 27 27	26 26 26 28 30	195 215 143 123 113	150 185 215 242 209	28 28 31 33 32	18 17 16 16 15	11 9.5 8.9 10	16 16 16 16 17
6 7 8 9 10	5.7 5.8 4.5 4.7 5.3	22 20 14 12 14	19 22 22 17 9.8	11 10 9 10 13	26 24 23 24 25	34 36 38 42 42	109 97 107 148 222	181 164 142 139 129	31 30 28 29 32	15 14 12 11 8.7	15 12 9.5 8.1 7.2	17 16 16 16 17
11 12 13 14 15	5.5 4.7 7.5 7.5 7.5	18 20 22 20 23	12 13 15 15 17	15 16 15 14 13	26 26 26 27 26	49 59 81 88 92	164 161 260 434 464	128 128 126 129 115	37 37 35 34 37	9.1 8.1 7.3 7.0 6.5	6.4 5.7 6.8 5.4 5.3	16 16 16 15 14
16 17 18 19 20	7.7 3.5 3.2 3.5 3.3	23 23 22 19 20	20 19 22 22 18	12 12 11 10 10	26 26 27 27 27	99 101 107 81 78	340 226 209 219 219	105 99 95 92 59	41 48 49 48 53	6.2 5.2 5.8 5.8	5.1 4.6 4.5 4.8 5.3	13 12 10 10
21 22 23 24 25	3.9 4.8 4.9 3.6 3.4	16 16 15 12 11	24 24 25 28 26	11 13 14 16 17	26 26 26 27 28	62 71 60 65 77	230 195 161 133 140	.6 .5 .8 1.0 6.2	52 51 48 38 31	5.5 5.7 5.8 6.4	6.1 6.9 8.1	10 10 10 8.8 8.8
26 27 28 29 50 31	3.8 9.3 14 16 15 16	9.8 8.7 8.5 8.7	32 25 21 22 16 18	17 16 17 18 21 24	27 25 24 -	94 106 114 119 129 132	158 217 188 142 132	15 23 27 28 28 28 28	25 22 18 17 19	7.0 9.1 11 12 12 11	11 12 13 14 14 14	8.8 8.4 8.0 8.0 7.7
一									<u> </u>			

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October November December	202.1 491.7 599.8	16 23 3 2	3.2 8.5 9.8	6.52 16.4 19.3	401 975 1,190
Calendar year 1936	23,945.6	1,120	3.2	65.4	47,490
January. February March. April. May. June. July. August. September.	440 732 2,192 5,864 2,993,1 1,042 300,7 269,5 383,5	24 28 132 464 242 53 18 15	9 25 26 97 .5 17 5.2 4.5 7.7	14.2 26.1 70.7 195 96.6 34.7 9.70 8.69 12.8	873 1,450 4,350 11,650 5,940 2,070 596 525 761
Water year 1936-37	15,510,4	464	.5	42.5	50,770

Burnt River near Durkee, Oreg.

Location.- Water-stage recorder, lat. $44^{\circ}34^{\circ}$, long. $117^{\circ}31^{\circ}$, in SW½ sec. 25, T. 11 S., R. 42 E., 3 miles west of Durkee.

Records available. October 1931 to September 1937. September 1928 to September 1932, at station 20 miles downstream, at Huntington.

Drainage area.- 697 square miles.

Extremes. Maximum discharge during year, 438 second-feet Apr. 17 (gage height, 4.51 feet); no flow for several hours July 21, 22. 1931-37: Maximum discharge, 1,290 second-feet Apr. 15, 1936 (gage height, 6.47 feet); no flow at times.

Remarks.- Records fair except those for periods of ice effect, Nov. 24 to Dec. 3,

Dec. 10-14, Dec. 31 to Jan. 4, Jan. 6-15, Jan. 17 to Feb. 6, Feb. 8-10, 13, 15-23,
which were computed on basis of gage height, weather records, and records for station
near Hereford and are poor. Diversions for irrigation above station; slight
regulation from small reservoir on South Fork of Burnt River; no regulation from Unity
Reservoir except for a small amount of water stored during construction of Unity Dam.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	0.6	0.6 .6 .6 .7	10 11 11 12 14	24 23 22 23 25	29 30 31 31 30	37 39 41 44 46	163 189 229 235 184	109 89 85 117 114	0.1 .1 .1 .1	1.1 .6 .6 .5	0.5 .6 1.0 1.0	1.7 1.6 1.5 1.4 1.6
6 7 8 9 10	.66 .55 .56	.7 .8 .7 .7	16 18 20 16 12	23 20 17 16 18	29 28 27 26 28	51 56 59 62 66	160 137 130 124 134	123 123 109 93 71	.1 .2 .1	.4 .3 .2 .1	.4 .7 1.0 1.0	1.7 1.7 1.9 1.5 1.3
11 12 13 14 15	.6 .8 .6 .5	.8999	13 13 14 16 18	19 20 20 20 18	29 29 29 30 28	72 76 85 94 114	163 210 152 175 222	61 56 54 49 41	.4 .8 1.4 1.0	. 20 . 30 . 30 . 30 . 30 . 30 . 30 . 30	1.1 1.0 1.0 .8	1.4 1.5 1.5 1.5
16 17 18 19 20	.4 .3 .1 .2 .2	.8 .9 .9 1.3 6.2	18 18 20 20 20	17 16 16 15 14	28 28 29 30 31	120 117 124 124 116	355 422 364 270 229	36 32 22 16 11	2.2 2.6 11 11 7.8	.3 .3 .3 .2	.7 .6 .6	1.4 1.2 .8 .6
21 22 23 24 25	.2 .3 .4 .4	7.6 9.5 8.9 9.5 9	22 22 25 28 25	14 15 17 19 20	30 30 30 32 32 33	100 91 82 77 73	233 216 204 191 168	8.9 9.2 5.4 4.9 4.0	7.2 7.8 5.2 1.7 1.4	.1 .1 .4 .4	.5 .4 .4 .4	1.3 2.0 2.6 2.7 2.7
26 27 28 29 30 31	.4 .4 .4 .5	8.9 7.6 7.5 8	28 31 32 24 25 27	20 19 19 24 27 28	35 35 36	74 86 102 110 121 136	146 113 109 134 134	3.6 1.5 .7 .4 .4	1.9 2.2 3.2 1.7 1.5	.4 .4 .4 .5	.3 .7 1.4 1.6 1.7	3.0 3.0 3.0 2.9

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in aore-feet
October	14.5 106.7 599	0.8 9.5 32	0.1 .6 10	0.47 3.56 19.3	29 212 1,190
Calendar year 1936	21,454.5	1,120	0	58.6	42,550
January February March April Har Jun Jun July August September	841 2,595 5,925 1,450.2 74.3 10.7 24.0	28 36 136 422 123 11 1.1 1.7 3.0	14 26 37 109 2 •1 •1 •3 •6	19.6 30.0 83.7 198 46.8 2.48 .35 .77 1.80	1,210 1,670 5,150 11,750 2,880 147 21 48 107
Water year 1936-37	12,302.4	422	.1	33.7	24,410

Powder River at Salisbury, Oreg.

Location. - Water-stage reocrder, lat. 44°39', long. 117°52', in NE\u00e4 sec. 36, T. 10 S., R. 39 E., 700 feet below railroad siding at Salisbury and 8\u00e4 miles south of Baker. Zero of gage is 3,633.84 feet above mean sea level.

Drainage area .- 230 square miles.

Records available. - December 1903 to August 1914, October 1928 to September 1937 in reports of Geological Survey; January 1904 to July 1914, June 1928 to September 1936 in reports of State engineer.

Average discharge. - 19 years (1904-13, 1926-28, 1929-37), 107 second-feet.

Extremes. Maximum discharge during year, 418 second-feet May 4 (gage height, 3.57 feet);

Minimum, 2.7 second-feet Oct. 30, Nov. 2 (gage height, 1.10 feet).

1903-14, 1928-37: Maximum discharge, 1,820 second-feet Mar. 20, 1910 (gage height, 7.05 feet, former site and datum); no flow Aug. 31, 1909, Sept. 7, 1931.

Remarks. - Records good except those for periods of ice effect, Nov. 18, Nov. 18 to

Dec. 2, Dec. 26-28, Jan. 3 to Mar. 3 (computed on basis of one discharge measurement,
gage heights, weather records, and records for station near Robinette), and those for
May and June, which are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.0	0.7	2.1	107
1.2	6.3	2.5	184
1.5	25	3.0	292
1.8	60		

Day	Oot.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	3.2 3.2 3.2 3.2 3.5	5.0 3.5 4.2 4.6 5.8	6 12 13 13 13	12 11 10 9 11	11 12 12 11 10	29 34 37 42 44	149 151 135 124 122	151 218 326 394 394	199 197 197 186 163	72 53 47 44 40	22 23 22 22 22 22	6.3 6.8 5.4 5.4 8.4
6 7 8 9 10	3.5 3.5 4.2 4.2	8.4 7.9 6.3 6.3	13 15 15 15 11	8 7 6 7 8	9 8 9 10	44 46 50 52 52	112 114 109 114 128	337 303 277 277 270	153 147 151 149 145	36 33 25 23 19	18 15 14 14 12	7.3 6.3 8.4 8.4 6.3
11 12 13 14 15	3.9 3.9 3.9 3.5	6.8 6.8 6.8 7.3 6.3	11 11 10 11 11	99998	11 12 13 12 11	54 63 69 78 85	128 121 130 201 262	252 220 239 314 348	139 134 132 128 153	18 17 17 18 18	12 12 13 12 11	5.4 5.8 5.8 5.8 5.8
16 17 18 19 20	3.9 3.9 3.9 4.2	6 6.8 7 6	8.9 10 12 11 10	7 7 6 6 6	10 9 8 8 9	105 110 112 102 93	246 213 199 197 199	337 348 360 348 314	174 190 151 159 186	19 22 24 24 24	10 10 10 10 9.4	5.4 7.3 5.0 5.0 7.9
21 22 25 24 25	3.2 3.5 3.9 4.2	6 5 6 5 4	11 12 12 13 13	7 8 9 10 11	10 12 14 17 20	83 8 3 75 74 78	201 192 169 149 139	30 3 326 314 292 326	180 163 149 132 112	24 24 22 22 22 21	8.4 7.3 5.4 5.0 5.0	7.9 7.3 6.8 6.3
26 27 28 29 50 31	5.0 5.0 5.0 4.6 4.2 5.4	4 4 3 4 5	12 12 11 11 11	10 9 8 8 9 10	25 24 26	85 91 89 91 93 99	159 222 230 203 161	326 314 303 283 241 211	102 96 81 75 85	22 50 35 30 27 22	4.6 3.9 3.9 4.6 5.4 5.8	6.3 6.3 6.3 6.3

Konth	Second- foot-days	Maximum	Minimo	Kean	Rum-off in acre-feet
October	121.0 170.1 360.9	5.4 8.4 15	3.2 3 6	3.90 5.67 11.6	240 337 716
Calendar year 1936	30,436.4	845	1.0	83.2	60,370
January February March April May June June July August September	264 351 2,240 4,969 9,266 4,408 892 352.7 194.3	12 26 112 252 394 199 72 23 8.4	6 8 29 109 151 75 17 3.9 5.4	8.5 12.5 72.3 166 299 147 28.8 11.4 6.48	524 696 4,440 9,860 15,380 8,740 1,770 700 385
Water year 1936-37	23,589.0	394	3.0	64.6	46,790

Powder River near Robinette, Oreg.

Location. - Staff gage, lat. 44°46', long. 117°04', in SEt sec. 22, T. 9 S., R. 46 E., 2 miles northwest of Robinette.

 $\frac{\text{Drainage area.- 1,710 square miles at present site (1,700 square miles at site used }{\text{prior to Aug. 24, 1936).}}$

Records available .- September 1928 to September 1937.

Extremes. - Maximum discharge observed during year, 1,350 second-feet May 28 (gage height, 3,44 feet); minimum daily discharge (estimated), 25 second-feet Jan. 8. 1929-37: Maximum discharge, 4,180 second-feet June 15, 16, 1933 (gage height, 6.9 feet); minimum, 18 second-feet Sept. 2-10, 1930.

Remarks. - Records fair except those for periods of ice effect, Nov. 27 to Dec. 4, Jan. 3 to Feb. 24, which were estimated on basis of weather records and records for other stations in Powder, Immaha and Grande Ronde River basins and are poor. Numerous diversions for irrigation above station, none below.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.5 30 .7 55 .9 95 1.2 175 1.5 285 1.8 410 2.2 600 2.6 820 3.0 1,070 3.5 1,420

Day	Oct.	Nov.	Dea.	Jan.	Feb.	Yar.	Apr.	May	June	July	Aug.	Sept.
1	46	57	60	68	70	148	365	478	710	455	105	52
2	49	57	100	64	75	172	410	575	820	410	98	57
3	50	55	110	40	80	189	432	655	820	285	95	55
4	48	64	110	50	90	210	500	1,000	820	365	88	62
5	48	64	108	70	95	203	500	1,140	765	325	91	75
6	48	64	102	60	94	273	500	1,070	710	261	86	82
7	48	68	105	40	90	325	525	940	655	242	75	75
8	48	69	95	25	85	305	525	940	655	210	71	71
9	46	73	75	35	80	305	575	820	655	160	84	68
10	48	73	69	45	75	285	600	820	765	138	102	82
11	46	71	49	50	78	285	550	765	710	112	102	80
12	48	75	64	55	84	305	525	765	600	100	100	69
13	49	80	75	60	90	365	550	940	600	88	95	62
14	55	84	80	60	95	410	575	940	600	140	98	50
14	64	88	84	55	95	410	710	1,070	655	142	88	4 6
16	64	98	88	53	92	388	765	1,000	820	135	82	43
17	64	102	86	50	84	388	765	1,210	940	118	80	40
18	60	98	84	46	75	432	655	1,210	820	108	82	46
19	62	88	77	44	70	365	655	1,210	820	102	77	57
20	60	84	86	40	65	325	655	1,140	1,140	100	71	52
21	62	84	100	35	62	257	628	1,070	940	86	66	57
22	60	75	98	55	65	242	600	1,070	880	68	54	48
23	64	77	95	70	68	234	550	1,070	820	75	48	49
24	71	73	102	80	74	234	525	1,070	682	77	44	54
25	73	54	100	85	86	234	525	1,070	600	73	86	57
26 27 28 29 50 51	77 75 69 71 64 60	54 45 40 40 50	80 84 80 77 82 75	85 85 86 80 70 65	115 142 140	234 249 265 261 265 277	500 628 600 600 500	1,280 1,210 1,070 940 820 765	500 478 478 478 478	84 100 105 84 82 82	75 69 64 60 54 52	54 46 43 44 44

Month	Second- foot-days	Kaximum	Minimum	Mean	Run-off in acre-feet
October. November. December.	1,797 2,104 2,680	77 102 110	46 40 49	58.0 70.1 86.5	3,560 4,170 5,320
Calendar year 1936	138,557	3,010	35	379	274,800
January. February Karch. April Kay June July August Beptember.	1,805 2,414 8,840 16,993 30,123 21,414 4,912 2,442 1,720	85 142 432 765 1,280 1,140 455 105 82	25 62 148 365 478 478 478 68 44	58.2 86.2 285 566 972 714 158 78.8 57.3	3,580 4,790 17,530 33,710 59,750 42,470 9,740 4,840 3,410
Water year 1936-37	97,244	1,280	25	266	192,900

Imnaha River at Imnaha, Oreg.

Location. - Water-stage recorder, lat. 45°34', long. 116°51', in SW1 sec. 16, T. 1 N., R. 48 E., at Imnaha, three eighths of a mile below mouth of Sheep Creek.

Drainage area .- 705 square miles.

Records available .- June 1928 to September 1937.

Extremes. - Maximum discharge during year, 1,740 second-feet May 5 (gage height, 3.99 feet); minimum daily discharge 35 second-feet Jan. 8. 1928-37: Maximum discharge, 3,450 second-feet May 21, 1932, June 10, 16, 1933; minimum, 35 second-feet Jan. 26, 1936, Jan. 8, 1937.

Remarks. Records good except those for period of ice effect, Jan. 4 to Feb. 4,

(Computed on basis of one discharge measurement, gage heights, weather records, and
records for stations on Powder and Grande Ronde Rivers) and for period of missing
gage-heights, Sept. 28-30, (computed on basis of weather records and records for
stations on Powder and Grande Ronde Rivers) which are poor. Diversions for
irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.9	53	2.3	510
1.1	78	2.5	61.5
1.3	117	2.9	850
1.5	175	3.3	1,140
1.7	245	3.7	1.470
1.9	325	4.1	1,830
0 7	43 E		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	85	61	85	70	106	245	688	855	620	192	100
2	78	80	91	64	75	117	242	955	990	593	172	102
3	78	62	96	53	80	111	231	1,260	1,100	545	159	100
4	52	89	100	55	50	111	224	1,520	1,060	510	143	100
5	53	91	102	70	75	113	217	1,560	920	500	135	113
6	83	85	111	65	77	120	217	1,300	820	460	130	115
7	80	82	120	45	5 0	120	206	1,260	790	402	127	109
8	78	72	113	35	78	122	203	1,140	790	366	122	104
9	78	83	104	50	82	140	234	1,220	850	338	115	100
10	78	87	83	65	75	159	277	1,220	990	317	115	92
11	78	92	70	70	77	18 2	285	1,100	850	301	120	89
12	78	91	60	70	82	203	273	1,100	760	289	117	87
13	78	92	85	75	78	228	403	1,180	694	277	111	87
14	77	91	102	85	80	245	718	1,380	664	269	109	87
15	87	91	104	90	75	245	920	1,340	682	253	111	85
16 17 18 19 20	85 83 82 82 82	91 89 87 87	106 102 98 94 94	100 100 90 80 60	75 77 75 75 70	265 257 277 245 238	760 610 555 571 604	1,300 1,300 1,260 1,220 1,180	730 760 688 820 1,270	238 224 214 206 196	106 102 98 96 102	83 83 83 83 83
21	83	87	94	40	80	214	642	1,100	1,140	189	102	87
22	83	87	98	60	89	206	620	1,140	1,100	182	100	91
23	83	77	96	70	98	206	545	1,140	920	172	94	94
24	83	67	113	75	98	200	485	1,100	790	172	94	96
25	85	74	102	80	10 0	203	470	1,300	718	175	94	94
26 27 28 29 30 31	85 85 85 83 83	71 60 51 54 57	92 94 85 82 65 77	80 75 70 65 60 65	102 102 102 -	210 228 238 231 242 245	626 885 790 648 582	1,340 1,300 1,300 1,180 955 850	688 670 664 676 664	235 253 224 206 172 165	96 98 98 100 100	92 90 90 88 86
\vdash						Second		' 	l		Ru	n-off in

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,528 2,399 2,894	87 92 120	77 51 60	81.5 80.0 93.4	5,010 4,760 5,740
Oalendar year 1936	113,156	1,740	40	309	224,400
January Pebruary March March April May Jun Jun Jun July August September.	2,147 2,307 6,027 14,288 37,188 25,143 9,263 3,556 2,793	100 102 277 920 1,560 1,270 620 192 115	35 70 106 203 688 664 165 94 83	69.3 82.4 194 476 1,200 838 299 115 93.1	4,260 4,580 11,950 28,340 73,760 49,870 18,370 7,050 5,540
Water year 1936-37	110,533	1,560	35	303	219,200

Salmon River below Valley Creek, at Stanley, Idaho

Location. - Water-stage recorder, lat. 44°14', long. 114°55', in SE\ SE\ sec. 34, T. 11

N., R. 13 E., three-quarters of a mile below mouth of Valley Creek and 1\ miles northeast of Stanley. Zero of gage 6,189.24 feet above mean sea level.

Drainage area. - 535 square miles.

Records available .- July 1925 to September 1937.

Average discharge. - 12 years, 554 second-feet.

Extremes. Maximum discharge during year, 1,720 second-feet May 29 (gage height, 2.48 feet); minimum discharge recorded, 196 second-feet Sept. 1-3 (gage height, 0.74 foot). A smaller discharge may have occurred during period of fee effect. 1925-37: Maximum discharge, 5,020 second-feet June 27, 1927 (gage height, 4.41 feet); minimum,100 second-feet (estimated) Nov. 20-30, 1929.

Remarks.- Records good except those for January and February, which are fair. Discharge for periods of missing gage-heights Nov. 2, 3, 5-9, 11-16, Dec. 12-14, 16-24, Mar. 31, Apr. 1-7, 9, 11-17, July 25, 26, July 28 to Aug. 8, Aug. 14-20, and of ice effect Dec. 26 to Mar. 29, computed on basis of weather records and records for other stations in Salmon River Basin. Small diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul y	Aug.	Sept.
1 2 3 4 5	277 277 277 277 272 272	302 230 230 297 310	245 245 249 216 220			240 240 240 230 230	250 250 250 250 250 250	606 713 808 887 990	1,230 1,140 1,150 1,240 1,210	847 808 769 722 704	265 260 255 250 245	196 196 196 210 220
6 7 8 9 10	272 272 272 277 277	300 270 250 260 277	245 249 254 249~ 237			240 240 230 240 250	250 250 245 250 254	1,030 1,010 1,000 1,020 1,050	1,110 1,030 990 1,130 1,150	732 695 704 641 581	240 235 230 224 224	213 210 210 210 210
11 12 13 14 15	277 277 277 272 272	280 290 290 290 290	224 240 250 255 258			260 260 260 260 260	255 255 300 400 500	1,030 1,000 1,030 1,120 1,170	1,090 1.020 949 908 898	557 525 487 480 465	224 220 224 220 215	206 202 202 202 202
16 17 18 19 20	267 267 267 267 272	290 292 297 267 277	260 260 260 260 250			260 250 240 240 240	450 400 364 358 390	1,210 1,240 1,310 1,430 1,370	928 1,020 980 949 1,110	436 416 396 383 364	210 210 210 210 210	206 206 206 206 206
21 22 23 24 25	272 272 262 277 287	272 272 258 258 258	240 240 240 245 249			240 250 250 240 240	451 390 364 358 396	1,290 1,320 1,430 1,370 1,530	1,230 1,370 1,420 1,300 1,150	347 324 312 307 320	210 206 202 202 202	216 213 213 213 213
26 27 28 29 30 31	282 282 277 287 297 302	258 245 241 245 258	250 240 240 240 230 230			240 240 240 240 258 250	525 589 541 480 509	1,570 1,580 1,660 1,690 1,600 1,370	1,040 959 918 898 877	310 292 290 280 275 270	202 199 202 202 202 202	213 213 213 216 216

~	Second-	w			Per	Inches 0.59 .57 .53 16.33 .47 .45 .53 .75 2.61	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October	8,557 8,174 7,570	302 310 260	262 241 216	276 272 244	0.516 .508 .456	0.59 .57 .53	16,970 16,210 15,010
Calendar year 1936	234,875	3,500	216	642	1.20	16.33	465,800
January. February March April May June July August September	6,820 6,440 7,598 10,774 37,434 32,394 15,039 6,812 6,254	260 589 1,690 1,420 847 265 220	- 230 245 606 877 270 199	220 230 245 359 1,208 1,080 485 220 208	.411 .430 .458 .671 2.26 2.02 .907 .411 .389	.45 .53 .75 2.61 2.25	13,530 12,770 15,070 21,370 74,250 64,250 29,830 13,510 12,400
Water year 1936-37	153,866	1,690	196	422	.789	10.70	305,200

Salmon River below Yankee Fork, near Clayton, Idaho

ocation. - Water-stage recorder, lat. 44°16', long. 114°44', in sec. 20, T. 11 N., R. 15 E., a quarter of a mile below Sunbeam Dam and mouth of Yankee Fork and 18 miles above Clayton.

Drainage area .- 841 square miles.

Records available .- October 1921 to September 1937.

Average discharge.- 14 years (1922-24, 1925-37), 816 second-feet.

Extremes. - Maximum discharge during year, 2,620 second-feet May 28 (gage height, 5.52 feet); minimum, 248 second-feet Sept. 2 (gage height, 2.03 feet).

1921-37: Maximum discharge, 8,000 second-feet (estimated) June 27, 1927; minimum, 160 second-feet (estimated) Nov. 25-30, 1929.

Remarks.- Records good except those for Jan. 4-31 which are fair. Discharge for periods of Ice effect or of missing gage heights, computed on basis of weather records and records for other stations on Salmon River. No diversions for irrigation above station except those above Stanley. Gage-height record furnished by Idaho Power & Mining Co.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.00	238	3.00	725	4.00	1,365	5.00	2,150
2.20	312	3.20	845	4.20	1,510	5.20	2,330
2.40	405	3.40	965	4.40	1,660	5.40	2,520
2.60	505	3.60	1,095	4.60	1,820	5.50	2,620
2,80	615	3,80	1,225	4.80	1.980	0,00	2 9020

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 6	362 362 367 367 371	391 308 304 405 410	308 316 308 296 304	330 316 326	310 320 320 320 320 320	334 334 326 308 316	344 362 339 330 344	875 1,100 1,260 1,400 1,510	1,820 1,740 1,780 1,860 1,740	1,060 998 965 905 905	352 348 339 334 326	258 255 258 258 288 312
6	362	395	316		300	330	339	1,550	1,620	935	316	288
7	362	348	330		290	321	326	1,510	1,510	875	312	284
8	362	321	334		290	316	339	1,470	1,470	875	308	288
9	362	339	334		296	326	357	1,550	1,660	845	304	292
10	362	352	316		316	348	339	1,580	1,660	755	304	280
11	357	362	326		344	344	348	1,550	1,550	708	300	272
12	357	367	339		344	339	339	1,510	1,470	670	296	272
13	357	367	350		321	344	410	1,550	1,360	642	292	269
14	357	367	360		339	344	598	1,740	1,330	642	288	272
15	357	367	360		308	339	755	1,860	1,330	626	284	276
16	352	371	360	300	334	348	681	1,900	1,360	576	280	272
17	352	381	360		326	330	582	1,980	1,440	544	276	269
18	357	362	360		330	348	549	2,100	1,360	522	276	265
19	367	362	360		339	308	527	2,280	1,330	500	280	265
20	362	357	340		300	344	566	2,100	1,550	485	276	272
21	352	352	330		300	308	676	1,980	1,660	465	276	326
22	352	344	330		357	348	582	2,060	1,780	445	272	288
23	348	330	330		352	344	532	2,280	1,740	435	269	280
24	367	326	334		330	330	490	2,330	1,580	430	269	284
25	376	334	344		330	316	566	2,380	1,400	445	269	284
26 27 28 29 30 31	357 362 352 371 391 395	330 312 304 304 312	348 330 339 330 312 316		339 330 330 - -	330 326 326 316 339 334	785 905 815 714 725	2,420 2,470 2,620 2,570 2,380 2,020	1,300 1,220 1,160 1,130 1,100	435 410 391 376 367 357	265 262 265 265 269 269	284 284 284 292 284

	Second-				Per	Tinches Ac 30 0.50 15 46 96 .46 5 15.68 59 .41 84 .40 94 .45 17 .69 2 2.56 8 1.99 51 .87 47 .40	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	11,237 10,484 10,320	395 410 360	348 304 296	362 349 333	0.430 .415 .396	.46	22,290 20,790 20,470
Calendar year 1936	354,230	6,000	282	968	1.15	15.68	702,600
Jamary February March April Hay June June July August Eepbember	9,372 9,035 10,264 15,564 57,885 45,010 19,589 9,041 8,397	357 348 905 2,620 1,860 1,060 352 326	290 308 326 875 1,100 357 262 255	302 323 331 519 1,867 1,500 632 292 280	.359 .384 .394 .617 2.22 1.78 .751 .347 .333	.40 .45 .69 2.56 1.99 .87	18,590 17,920 20,360 30,870 114,800 89,280 38,850 17,930 16,660
Water year 1936-3%	216,198	2,620	-	592	.704	9.56	428,800

Salmon River near Challis, Idaho

Location.- Water-stage recorder, lat. 44°23', long. 114°15', in sec. 7, T. 12 N., R. 19 E., 250 feet below mouth of Bayhorse Creek and 9 miles south of Challis.

Drainage area. - 1,740 square miles.

Records available .- October 1928 to September 1937.

Extremes.— Maximum discharge during year, 3,740 second-feet May 28 (gage height, 5.17 feet); minimum discharge recorded, 360 second-feet Nov. 29 (gage height, 1.39 feet). A smaller discharge may have occurred during period of ice effect. 1929-37: Maximum discharge, 9,790 second-feet June 2, 1936 (gage height, 7.83 feet); minimum, 238 second-feet Dec. 10, 1932 (gage height, 0.89 foot).

Remarks. - Records good except those for January and February, which are fair. Discharge for period of ice effect or missing gage heights, Dec. 25 to Mar. 9, computed on basis of one discharge measurement, weather records, and records for other stations on Salmon River. Some diversions for irrigation in addition to those above Stanley.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to	Mar. 9		Mar. 10 to	Sept. 30	1
1.60 1.80 2.00 2.20	4 22 4 93 576 670	1.60 1.90 2.20 2.50 2.80 3.10	400 525 670 830 1,025 1,250	3.40 3.70 4.00 4.30 4.60 5.20	1,505 1,790 2,110 2,460 2,860 3,820

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	576	576	456			520	484	1.060	2,590	1,600	570	404
2	576	55 4	493			520	516	1,290	2,460	1,550	561	400
3	5 76	456	474			520	494	1,550	2,520	1,460	561	404
4	576	533	439			520	472	1,840	2,720	1,370	561	408
5	576	622	474			520	489	2,060	2,590	1,370	556	472
6	576	622	513			540	484	2,220	2,400	1.500	556	448
7	576	599	533			540	468	2,160	2,220	1,370	548	448
8	576	533	5 3 3			540	476	2,110	2,160	1,370	543	452
9	576	513	533		1	540	507	2,160	2,340	1,330	543	468
10	576	533	456			561	489	2,280	2,400	1,210	512	448
11	576	576	439			538	489	2,220	2,340	1,130	489	444
12	554	576	456			538	489	2,110	2,220	1,060	484	444
13	554	5 76	493			534	561	2,160	2,110	1,020	480	440
14	554	576	493			566	775	2,400	2,000	990	472	436
15	554	576	533			548	922	2,590	2,000	1,020	452	432
16	5 76	576	554			561	860	2,590	2.060	922	452	432
17	576	576	554		1	530	748	2,720	2,280	890	444	424
18	576	576	554		l	534	720	2,860	2,110	860	436	412
19	576	554	513		l	494	695	3,080	2,000	830	440	416
20	576	554	493			512	695	2,860	2,220	775	444	428
21	576	533	533			494	802	2,660	2.590	748	436	516
22	554	5 33	533			538	748	2,790	2,940	720	428	494
23	576	513	533		i	556	720	3.080	2,790	695	416	460
24	576	493	533			543	645	3,160	2,400	670	412	460
25	576	513	530			512	695	3,320	2,110	695	416	46e
26	576	493	530			498	748	3,400	1.940	720	412	472
27	576	474	530		l	494	1,020	3,480	1.790	670	408	472
28	554	456	530		l	498	1,060	3,650	1,740	645	408	472
29	554	439	520			480	922	3.650	1,740	620	412	476
30	576	456	500		l	480	860	3,400	1,690	595	424	472
31	599	-	500			489		2,940		570	416	-

	Second-	Maximum	Minimum		Per	Run-off		
Month	foot-days	rieximum	Minimum	Mean	aquare mile	Inches	Acre-feet	
October November December	17,725 16,160 15,758	599 6 22 554	554 439 439	572 539 508	0.329 .310 .292	0.38 .35 .34	35,160 32,050 31,260	
Calendar year 1936	511,556	8,980	422	1,398	. 803	10.94	1,015,000	
Jamary February Harch April Hay June June July August September	14,725 14,000 16,258 20,053 79,850 67,470 30,975 14,692 13,422	566 1,060 3,650 2,940 1,600 570 516	- 480 468 1,060 1,690 570 408 400	475 500 524 668 2,576 2,249 999 474 447	.273 .287 .301 .384 1.48 1.29 .574 .272 .257	.31 .30 .35 .43 1.71 1.44 .66 .31	29,210 27,770 32,250 39,770 158,400 133,800 61,440 29,140 26,620	
Water year 1936-37	321,088	3,650	-	880	.506	6.87	636,900	

Salmon River at Salmon, Idaho

Location. Water-stage recorder, lat. 45°ll, long. 113°54', in sec. 6, T. 21 N., R. 22 E., just above Lemhi River, near Rose ranch buildings, 1,000 feet below island and three-eighths of a mile below highway bridge at Salmon.

Drainage area .- 3,600 square miles.

Records available .- April 1912 to September 1916, July 1919 to September 1937.

Average discharge. - 20 years (1913-16, 1920-37), 1,740 second-feet.

Extremes. Maximum discharge during year, 3,890 second-feet May 28,29; maximum gage height, 7.45 feet Jan. 26, during ice jam; minimum discharge, 242 second-feet Jan. 8 (gage height, 1.50 feet).
1912-16, 1919-37: Maximum discharge observed, 16,400 second-feet June 12, 1921; minimum, that of Jan. 8, 1937.

Remarks. - Records good except those for Jan. 9 to Feb. 28, which are fair. Discharge for periods of ice effect or missing gage heights, Nov. 3-6, 10-13, 17-19, 22-27, Nov. 29 to Dec. 6, Jan. 9 to Mar. 8, computed on basis of weather records and records for other stations on Salmon River. Diversions for irrigation above station.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Jan. 8)

1.90	420	3.40	2,100
2.20	615	3.70	2,630
2.50	870	4.00	3,230
2.80	1,215	4.30	3,890
3.10	1,630	4,00	0,000

Day	Oct.	Nov.	Dec.	Jan.	₹eb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	760 780 790 790 790	1,010 1,050 900 950 1,100	900 1,000 950 875 900	770 740 624 710 800		900 900 900 900 900	813 822 822 794 784	1,130 1,380 1,640	3,020 2,720 2,630 2,720 2,820	1,960 1,860 1,780 1,720 1,660	690 668 652 645 638	486 493 500 512 545
6 7 8 9	800 810 820 810 810	1,100 1,120 1,080 1,040 1,050	1,000 1,060 1,060 1,050 1,010	850 588 350		900 900 900 870 870	784 775 766 766 784	2,360 2,270 2,180	2,720 2,450 2,360 2,360 2,820	1,690 1,740 1,690 1,700 1,660	622 615 594 587 580	573 559 552 573 601
11 12 13 14 15	810 840 830 830 840	1,060 1,070 1,080 1,080 1,090	893 800 830 871 893			902 912 902 902 922	775 766 758 794 842	2,240 2,170 2,270	2,630 2,540 2,360 2,250 2,170	1,530 1,450 1,410 *1,320 *1,240	573 566 559 552 538	587 587 580 552 538
16 17 18 19 20	840 850 860 871 882	1,090 1,090 1,080 1,080 1,080	948 1,040 1,040 1,020 981	900		975 964 922 870 832	1,120 1,120 998 944 902	2,720 2,920 3,120	2,170 2,270 2,360 2,240 2,180	*1,150 1,060 964 933 902	532 526 519 512 512	538 545 552 545 538
21 22 23 24 25	882 893 882 *900	1,090 1,050 1,000 1,000	926 1,010 1,010 1,000 1,020			822 832 860 870 851	902 986 944 912 842	2,920 3,120 3,340	2,540 2,920 3,020 2,820 2,540	860 822 794 766 775	512 506 486 486 486	608 630 638 601 615
26 27 28 29 30 31	937 959 959 981 970 981	1,000 950 937 900 900	1,010 970 992 959 820 780			822 813 822 813 794 804	1,020 1,300 1,230 1,090	3,660 3,780 3,780	2,360 2,180 2,080 2,050 2,050	870 813 775 750 732 724	486 480 474 474 486 493	652 652 645 682 698
		1	lon th		L	Second	1- 1		Vini	Von	Ru	n-off in

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in
October	26,676 31,027 29,618	981 1,120 1,060	760 900 780	861 1,034 955	52,910 61,540 58,750
Calendar year 1936	637,492	8,300	690	1,742	1,264,000
January February Barch April Bay June June July August September	25,200 27,146	975 1,300 3,780 3,020 1,960 690 698	350 794 758 1,020 2,050 724 474 486	843 900 876 900 2,666 2,478 1,229 550 579	51,830 49,980 53,840 53,570 164,000 147,500 75,570 33,820 34,470
Water year 1936-37	422,341	3,780	350	1,157	837,800

^{*}Interpolated.

Salmon River at Whitebird, Idaho

Location. - Water-stage recorder, lat. 45°45', long. 116°20', in sec. 22, T. 28 N., R. 1 E., Just above Whitebird Creek, one-half mile downstream from Canfield-Joseph highway bridge, and 1 mile southwest of Whitebird.

Drainage area. - 13,400 square miles.

Records available. - August 1910 to September 1917, October 1919 to September 1937.

Average discharge. - 25 years, 10,200 second-feet.

Extremes.— Maximum discharge during year, 34,400 second-feet May 27 (gage height, 21.75 feet); minimum, 1,900 second-feet Jan. 3 (gage height, 10.69 feet), from rating curve extended below 2,500 second-feet.

1910-17, 1919-37: Maximum discharge, 88,800 second-feet June 9, 1921 (gage height, 31.2 feet); minimum, 1,580 second-feet Dec. 11, 1932 (gage height, 10.23 feet), from rating curve extended below 2,200 second-feet.

Maximum stage known, about 37.5 feet, present datum, June 1894 (discharge, 120,000

second-feet).

Remarks.- Records excellent except those for January and February, whic Amount of water diverted above station for irrigation is negligible. which are good.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

10.70 11.20 11.70 12.20	1,900 2,340 2,930 3,670	14.20 14.70 15.20 15.70	7,460 8,580 9,780 11,060	17.70 18.20 18.70 19.20	17,080 18,870 20,740 22,680	21.20 21.80	31,440 34,360	
12.70 13.20 13.70	4,520 5,440 6,420	16.20 16.70 17.20	12,430 13,880 15,410	19.70 20.20 20.70	24,720 26,860 29,100			
D1:	scharge, it	second-fe	et. weter	veer October	1936 to	September 19	937	

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,070	3,280	2,240	2,290	3,510	3,070	3,670	7,250	23,100	10,300	3,830	2,400
2	3,000	3,360	2,620	2,020	3,670	3,140	3,920	7,900	22,300	9,780	4,000	2,400
3	3,000	3,210	3,140	1,980	3,510	3,210	4,080	10,000	22,700	9,050	3,920	2,400
4	3,000	2,930	3,140	2,150	3,510	3,280	4,000	13,300	22,700	8,580	3,750	2,340
5	3,070	2,930	3,070	2,450	3,440	3,280	3,830	16,700	21,100	8,120	3,590	2,400
6	3,070	3,510	2,930	2,930	3,280	3,360	3,670	18,500	19,600	7,680	3,510	2,560
7	3,140	3,590	2,930	2,800	3,210	3,360	3,590	18,900	18,500	7,680	3,360	2,680
8	3,070	3,510	3,280	2,500	3,140	3,360	3,510	18,500	17,800	7,460	3,210	2,620
9	3,070	3,210	3,510	2,150	3,360	3,360	3,590	18,900	18,900	7,040	3,140	2,560
10	3,070	3,000	3,440	2,340	3,070	3,360	3,750	20,000	21,900	7,040	3,070	2,500
11	3,070	3,000	3,210	2,620	3,210	3,590	3,920	20,400	23,100	6,620	3,070	2,500
12	3,070	3,070	2,860	2,740	3,000	3,830	4,000	19,600	20,400	6,420	3,000	2,500
13	3,070	3,210	2,400	2,560	3,000	4,000	4,170	20,000	19,600	6,220	3,000	2,450
14	3,070	3,280	2,400	3,210	2,930	4,000	5,440	21,900	18,100	6,020	2,930	2,450
15	3,140	3,280	2,740	3,670	2,930	4,000	6,830	24,700	17,100	5,820	2,800	2,450
16	3,210	3,280	3,000	3,750	2,930	4,000	7,680	25,600	17,100	5,820	2,800	2,400
17	3,210	3,360	3,210	3,590	2,930	4,080	7,460	26,900	18,100	5,630	2,740	2,340
18	3,210	3,510	3,280	3,510	2,860	4,080	6,830	28,600	17,100	5,440	2,680	2,290
19	3,210	3,510	3,280	3,670	2,930	4,000	6,420	30,500	16,100	5,250	2,620	2,290
20	3,210	3,360	3,210	3,510	2,930	3,670	6,220	30,500	17,100	4,970	2,560	2,290
21	3,210	3,210	3,140	3,210	3,000	3,360	6,420	27,700	20,400	4,790	2,560	2,340
22	3,140	3,140	3,070	3,070	2,740	3,280	6,620	27,700	20,000	4,520	2,560	2,450
23	3,140	3,070	3,070	2,800	2,800	3,280	6,420	29,600	18,900	4,340	2,500	2,680
24	3,140	3,000	3,280	2,930	2,930	3,360	6,020	29,600	17,100	4,260	2,450	2,680
25	3,140	2,930	3,280	2,860	2,930	3,360	5,630	30,500	15,400	4,170	2,450	2,620
26 27 28 29 30 31	3,210 3,210 3,210 3,210 3,210 3,210	2,620 2,560 2,450 2,290 2,240	3,280 3,140 3,070 3,070 2,930 2,620	3,210 3,440 3,590 3,510 3,670 3,510	3,070 3,070 3,070 - -	3,360 3,360 3,510 3,510 3,510 3,590	5,820 7,040 8,120 8,350 7,900	31,900 33,400 33,400 31,900 28,200 24,700	13,900 12,700 11,900 11,300 10,500	4,260 4,790 4,700 4,340 4,080 3,920	2,450 2,400 2,400 2,340 2,340 2,400	2,560 2,560 2,620 2,620 2,620

w	Second-	w			Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October	97,060 92,900 93,840	3,210 3,590 3,510	3,000 2,240 2,240	3,131 3,097 3,027	0.234 .231 .226	0.27 .26 .26	192,500 184,300 186,100
Calendar year 1936	3,591,560	69,200	2,240	9,813	•732	9.96	7,124,000
January February March. April April June July August September	92,240 86,960 109,510 164,920 727,250 544,500 189,110 90,430 74,570	3,750 3,670 4,080 8,350 33,400 23,100 10,300 4,000 2,680	1,980 2,740 3,070 3,510 7,250 10,500 3,920 2,340 2,290	2,975 3,106 3,533 5,497 23,460 18,150 6,100 2,917 2,486	.222 .232 .264 .410 1.75 1.35 .455 .218 .186	.26 .24 .30 .46 2.02 1.51 .52 .25	183,000 172,500 217,200 327,100 1,442,000 1,080,000 375,100 179,400 147,900
Water year 1936-37	2,363,290	33,400	1,980	6,475	.483	6.56	4,687,000

Valley Creek at Stanley, Idaho

Location.- Staff gage, lat. 44°13', long. 114°56', in sec. 3, T. 10 N., R. 13 E., a quarter of a mile above confluence with Salmon River, three-eighths of a mile below upper Stanley, and three-quarters of a mile above Stanley.

Drainage area. - 176 square miles.

Records available. - December 1910 to October 1913, May 1921 to September 1937.

Average discharge. - 17 years (1911-13, 1922-37), 175 second-feet.

Extremes. - Maximum discharge observed during year, 538 second-feet May 3 (gage height, 2.36 feet); minimum, 48 second-feet Aug. 26-28; minimum gage height, 0.90 foot Aug. 26, 28, 1910-13, 1921-37: Maximum discharge observed, 1,850 second-feet May 29, 1921 (gage height, 4.4 feet); minimum, 40 second-feet (estimated) Nov. 17-30, 1929, and Dec. 8-15, 1932.

Remarks.- Records good except those for periods of ice effect or of missing or erroneous gage heights, Nov. 19-25, 29, 30, Dec. 1-4, Jan. 1 to Feb. 6, Apr. 12, 13, 15, 16, 18-20, 22-24, 29, June 25, 26, Aug. 9-12, which were computed on basis of weather records and records for stations in upper Salmon River Basin and are fair. Gage read two to four times a week except during the spring run-off, when daily observations are made. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	*73 *74 75 73 *72	*79 *77 75 *73 *70	62 60 64 69 73		60 60 60 60	*66 66 *66 65 *66	*69 72 *70 68 *68	382 457 538 457 484	406 336 484 484 358	232 232 *220 *209 *197	*70 68 68 66 63	54 *56 *58 60 *60
6 7 8 9	70 *70 70 *71 *72	*68 66 *73 *79 86	*68 63 *63 63 *62		60 65 63 *64 65	*68 *69 *70 *71 *72	68 *68 *68 68 *67	*470 457 457 432 352	*325 292 292 382 406	*185 *174 *162 *150 *139	*62 61 60 59 58	60 *62 *64 66 *64
11 12 13 14 15	73 *73 *72 72 *72	*85 *85 84 84 *85	*62 61 60 *60 *60		*65 6 5 *65 *65 *65	*74 75 *74 *74 *74	66 66 90 137 150	382 358 382 382 382	336 *304 271 271 292	127 115 120 129 122	57 56 55 *54 *53	*63 *62 60 *58 56
16 17 18 19 20	72 *70 68 *68 *68	*86 *87 88 88 88	*60 60 *60 60 *62		65 *65 65 *66 66	73 *72 70 *69 68	150 137 120 120 120	382 406 432 510 406	313 336 406 432 484	107 98 *95 92 88	52 *52 52 *52 *52	*57 *59 60 *60 60
21 22 23 24 25	*68 68 *68 68 66	88 88 88 88 84	63 *63 *63 63 *64		66 *66 *65 65 *66	75 *72 *70 *68 65	122 120 120 120 214	432 432 432 432 432	432 *419 406 336 314	81 83 81 83 79	52 *51 50 *49 *49	*60 *61 61 *62 63
26 27 28 29 30 31	*72 *78 84 *84 *84 83 *81	81 *82 84 66 64	65 *63 61 *61 *60 60		66 *66 *66 - -	*65 65 *64 *64 63 66	292 271 214 220 313	*444 457 484 484 432 457	293 271 271 *262 252	77 77 73 75 75	48 *48 48 *50 52 *53	63 *63 *63 *63 *63

	Second-				Per	Run-off		
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet	
October November December	2,248 2,419 1,938	8 4 88 73	66 64 60	72.5 80.6 62.5	0.412 .458 .355	0.48 .51 .41	4,460 4,800 3,840	
Calendar year 1936	73,177	1,170	55	200	1.14	15.45	145,200	
Jamary February March April Hay June July August September	1,705 1,796 2,139 3,848 13,456 10,466 3,848 1,720 1,821	66 75 313 538 484 232 70 66	- 60 63 66 358 252 73 48 54	55.0 64.1 69.0 128 434 349 124 55.5 60.7	.312 .364 .392 .727 2.47 1.98 .705 .315	.36 .38 .45 .81 2.85 2.21 .81 .36	3,380 3,560 4,240 7,630 26,690 20,760 7,630 3,410 3,610	
Water year 1936-37	47,403	538	48	130	.739	10.01	94,010	

^{*}Interpolated.

Yankee Fork of Salmon River near Clayton, Idaho

Location. - Staff gage, lat. 44°16', long. 114°44', in sec. 20, T. 11 N., R. 15 E., 350 feet above confluence with salmon River and 18 miles west of Clayton.

Drainage area. - 195 square miles.

Records available .- May 1921 to September 1937.

Average discharge. - 14 years (1922-24, 1925-37), 173 second-feet.

Extremes. Maximum discharge observed during year, 800 second-feet May 29 (gage height, 4.30 feet); minimum occurred during period of ice effect.
1921-37: Maximum discharge, 3,360 second-feet June 12, 1921 (gage height, 6.79 feet, present datum); minimum, 10 second-feet (estimated) Dec. 5, 6, 1927.

Remarks.- Records fair except those for Nov. 2 to Apr. 7, which are poor. Discharge for period of ice effect, Nov. 2 to Apr. 7, and for periods of faulty gage heights, May 14, 15, Sept. 22, 23, computed on basis of three discharge measurements, weather records, and records for other stations in Salmon River Basin. Discharge for Oct. 16, Apr. 23, 28, May 7, 12, July 14, 15 interpolated. No diversion or regulation above station. Gage-height record furnished by Idaho Power & Mining Co. Gage read twice daily.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and

	q1sc.	narge,	in secon	na-reet	,
1.3	47	2.3	165	3.3	398
1.5	64	2.5	202	3.5	460
1.7	63	2.7	245	3.7	530
1.9	106	2.9	292	3.9	609
2.1	133	3.1	343	4.1	700
				4 7	000

 $\frac{4.3}{100}$ 800 Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.		Mar.	Apr.	May	Jun	e Ju	y A	ug.	Sept.
1 2 3 4 5	64 64 64 62 64	54			40			45	165 223 245 245 370	44 44 49 49	4	192 165 165 156 148	78 78 78 78 78 73	53 53 53 54 64
6 7 8 9 10	63 64 63 63	50			*40			51 51 52	330 311 292 292 413	29 29 34 37 42	12 13 10	148 156 165 148 156	73 73 64 64 64	62 59 55 54 54
11 12 13 14 15	63 64 64 64						45	5 5 54 54 55 55	530 530 530 530 530	42 33 31 31 30	0 .7 .7	133 119 174 153 133	64 63 63 63 63	55 55 54 53 53
16 17 18 19 20	64 64 63 62 59				40			60 64 64 73 78	530 530 530 568 568	30 30 30 30 30)4)4)4	94 106 106 94	64 64 60 60	47 47 48 47 47
21 22 23 24 25	58 57 58 57 55	45						78 83 83 83 83	568 568 609 609 653	33 33 25 26	60 60 80	88 88 88 88 88	60 60 60 59	83 70 50 55 54
26 27 28 29 30 31	53 54 53 54 54 55						*46 45	93 94 130 165 165	653 700 750 800 609 494	22 20 21 21 20)2 .2 .2 .2	106 83 83 83 83 83 73	56 57 55 55 55 54	53 52 52 54 52
	<u> </u>	Month			cond- t-days	Me	ıximum	Minim	um Me	an	Per square mile	Inche	Run-o	ff re-feet

Month	Second-	Maximum	Minimum		Per	Ru	n-off
Holth	foot-days	LIEXTIMUM	rixiiimum	Mean	square mile	Inches	Acre-feet
October	1,872	64	53	60.4	0.310	0.36	3,710
November	1,429	-	-	47.6	.244	.27	2,830
December	1,395	-	-	45.0	.231	.27	2,770
Calendar year 1936	82,797	2,010	-	226	1.16	15.80	164,200
January	1,240	-	-	40.0	.205	.24	2,460
February	1,120	-	-	40.0	•205	.21	2,220
March	1.396	-	-	45.0	.231	-27	2,770
April	2,128	165	~	70.9	.364	.41	4,22
May	15,275	800	165	493	2.53	2.92	30,300
June	9.810	494	202	327	1.68	1.87	19,460
July	3,774	192	73	122	-626	.72	7,49
August	1,978	78	54	63.8	.327	.38	3,920
September	1,642	83	47	54.7	.281	.31	3,260
Water year 1936-37	43,059	800	-	118	•605	8.23	85,41

^{*}Discharge measurement.

East Fork of Salmon River near Clayton, Idaho

Location. - Staff gage, lat. 44°13', long. 114°17', in NW1 sec. 1, T. 10 N., R. 18 E., at highway bridge, 4 miles above confluence with Salmon River and 7 miles southeast of clayton.

Drainage area. - 497 square miles.

Records available .- September 1928 to September 1937.

Extremes. Maximum discharge observed during year, 815 second-feet June 22-24 (gage height, 2.75 feet); minimum occurred during period of ice effect. 1928-37: Maximum discharge, 2,830 second-feet June 25, 1932 (gage height, 4.48 feet); minimum discharge observed, 29 second-feet Dec. 3, 1928; minimum gage height observed, 0.38 foot Nov. 23, 1931.

Remarks. - Records fair except those for period of ice effect, Nov. 28 to Mar. 1, which were computed on basis of one discharge measurement, weather records, and records for other stations in Salmon River Basin, and are poor. Discharge for May 31, June 12, 23 interpolated. Several small diversions for irrigation above station. Gage read once daily.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1 to Nov. 25, July 26 to Aug. 26)

0.7	43	1.9	325
.9	68	2.1	418
1.1	102	2.3	530
1.3	144	2.5	650
1.5	192	2.7	780
3 17	0.63	0.0	000

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	89 89 89 89	81 86 86 86 89				68 68 68 68	68 68 68 68 68	102 122 122 144 167	369 325 418 472 325	306 325 306 268 286	78 78 70 70 70	52 52 54 54 52
6 7 8 9 10	89 88 89 91	89 89 88 89 86				68 68 68 71	68 68 68 71 71	192 220 220 220 286	394 418 325 418 325	418 325 286 268 268	70 68 70 62 6 2	52 52 52 52 51
11 12 13 14 15	91 91 91 89 89	86 84 84 84 81			50	71 71 68 68 68	73 76 84 84 102	220 251 306 306 347	347 336 325 306 306	149 149 149 153 144	62 62 62 60 62	51 51 50 50 48
16 17 18 19 20	89 89 89 89	81 78 76 78		ı		68 68 68 68	102 84 84 84 84	418 418 394 394 369	306 445 347 347 369	158 144 144 149 140	60 61 61 60	48 54 54 61 61
21 22 23 24 25	89 89 89 89	78 78 78 78 70			60	76 71 68 68	102 84 84 102 102	347 472 650 682 715	620 815 815 815 590	133 122 122 1 2 2 268	55 55 52 52 52	65 65 65 68 68
26 27 28 29 30 31	91 91 89 89 84 84	60 60 60 60 60] =	71 68 68 68 68	102 84 84 84 102	715 590 590 650 472 420	472 418 369 325 325	114 114 104 104 95 95	54 46 52 54 54 54	68 68 68 71 76

	Second- foot-days	Maximum			Per	Run-off	
Month			Minimum	Mean	square mile	Inches	Acre-feet
October November December	2,762 2,364 1,860	91 89 -	84 60 -	89.1 78.8 60.0	0.179 .159 .121	0.21 .18 .14	5,480 4,690 3,690
Calendar year 1936	69,019	1,300	1	189	.380	5.17	136,900
Jamery February March. April May June June July August September	1,550 1,480 2,131 2,473 11,521 12,787 5,928 1,888 1,733	76 102 715 815 418 78 76	- 68 68 102 306 95 46 48	50.0 52.9 68.7 82.4 372 426 191 60.9 57.8	.101 .106 .138 .166 .748 .857 .384 .123	.12 .11 .16 .19 .86 .96 .44 .14	3,070 2,940 4,230 4,910 22,850 25,360 11,760 3,740 3,440
Water year 1936-37	48,477	815	-	133	.268	3.64	96,160

Pahsimeroi River near May, Idaho

Location. - Staff gage, lat. 44°42', long. 114°03', in Warsec. 25, T. 16 N., R. 20 E.; a quarter of a mile below highway bridge on Challis-Salmon River highway, a quarter of a mile above confluence with Salmon River and 10 miles northwest of May.

Records available .- October 1929 to September 1937.

Extremes.- Maximum discharge observed during year, 234 second-feet Nov. 4, 5, 8-10, 13-27; maximum gage height observed, 2.39 feet Nov. 19, 21-24; minimum discharge observed, 83 second-feet May 23-25, 28; minimum gage height, 1.68 feet May 23-25, 1930-37; Maximum discharge observed, 279 second-feet Dec. 10-14, 16, 17, 1929; minimum, 75 second-feet Apr. 28, 1934.

Remarks. - Records fair. Numerous diversions above station for irrigation. Gage read once daily. Discharge for Mar. 27, 28, Apr. 19, 20, June 11, 19, Sept. 20, 21, 27 interpolated.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Deg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	166 166 177 177 177	212 212 212 234 234	212 212 212 212 212	212 212 212 212 212	188 188 188 200 200	200 200 200 212 212	200 200 200 200 200 188	144 144 144 115 124	91 94 97 101 102	113 113 115 113 134	124 124 124 124 124	124 115 124 124 124
6 7 8 9 10	177 177 177 177 177	223 223 234 234 234	212 212 212 223 212	212 212 212 212 200	200 200 200 200 200	212 212 212 223 223	158 158 188 155 185	115 115 115 115 115	101 97 99 102 104	124 124 124 124 124	124 124 124 115 115	124 124 124 134 124
11 12 13 14 15	177 177 158 188 188	223 223 234 234 234	212 212 212 212 212	200 200 200 200 200	188 200 200 200 200	212 212 212 212 212 212	177 177 177 177 166	111 110 106 102 102	107 110 110 110 110	124 115 115 115 115	115 115 115 111 110	124 124 124 124 134
16 17 18 19 20	188 188 188 188 188	234 234 234 234 234	212 212 212 212 212	200 200 200 200 212	200 200 188 188 188	223 223 223 212 212	166 166 166 155 145	101 101 99 97 94	108 108 110 109 108	113 113 113 110 110	108 111 113 115 113	134 134 134 134 137
21 22 23 24 25	188 188 200 200 200	234 234 234 234 234	212 212 212 212 212 212	212 200 200 200 200	188 188 200 200 200	212 212 212 212 212	134 134 134 134 134	91 86 83 83 83	108 110 110 110 111	110 108 108 108 144	113 113 113 115 115	141 144 134 134 144
26 27 28 29 30 31	200 200 212 212 212 212	234 234 223 223 212	212 223 212 212 212 212	200 200 200 188 188 188	200 200 - -	212 208 204 200 200 200	134 134 134 144 144	84 84 83 84 86 89	113 113 111 111 111	134 134 124 124 124 124	115 113 115 124 124 124	144 144 144 144 144

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,830 6,866 6,594	212 234 223	166 212 212	188 229 213	11,560 13,620 13,080
Calendar year 1936	64,174	234	99	175	127,300
January. February. March. April. May June June July August September.	6,296 5,492 6,543 4,960 3,205 3,186 3,693 3,693 3,632 3,961	212 200 223 200 144 113 144 124	188 188 200 134 83 91 108 108	203 196 211 165 103 106 119 117	12,490 10,890 12,980 9,840 6,360 6,320 7,320 7,200 7,860
Water year 1936-37	60,258	234	83	165	119,500

Lemhi River at Salmon, Idaho

Location. - Staff gage, lat. 45°10', long. 113°51', in sec. 10, T. 21 N., R. 22 E., 250 feet below highway bridge, 700 feet above diversion gates of power canal, 1,000 feet above Kirtly Creek, and 1 mile southeast of Salmon.

Records available .- August 1928 to September 1937.

Extremes.— Maximum discharge during year, 267 second-feet Apr. 2; maximum observed gage height, 1.93 feet Feb. 28 (log on control); minimum discharge, 14 second-feet Aug. 30 to Sept. 3; minimum gage height, 0.82 foot Aug. 30, 31, Sept. 1.
1928-37: Maximum discharge, about 2,400 second-feet June 3, 1936 (gage height, about 4.0 feet, from floodmarks), from rating curve extended above 1,200 second-feet; minimum, 14 second-feet July 22, 23, 1931, Aug. 30 to Sept. 3, 1937.

Remarks. - Records fair. Discharge for periods of ice effect or missing gage heights,

Dec. 29 to Mar. 6, computed on basis of one discharge measurement and weather records.

Discharge for May 10, 18, 25, June 4, 8, 16, 23, 30, July 3, 10, 15, 28, Aug. 26, 27,

Sept. 3 interpolated. Many diversions for irrigation above station. Idaho Power Co.

(formerly Salmon River Power & Light Co.) diverts water for power 700 feet downstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oot.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	109 109 104 104 104	239 248 253 253 253	178 178 171 171 171		} 185	} 195	222 267 231 214 222	117 112 112 101 96	117 106 92 93 94	38 32 32 32 32	34 35 35 35 32	14 14 14 15 16
6 7 8 9 10	114 120 126 131 131	244 235 244 248 248	164 171 171 178 178		*186	197 209 214 222	222 214 214 214 222	84 74 55 52 50	96 94 126 157 197	32 32 47 48 60	32 31 34 31 31	16 17 19 19
11 12 18 14 15	144 150 157 171 178	253 244 253 235 244	164 131 157 164 171			231 222 222 222 222 222	222 231 231 239 258	48 42 42 39 37	218 226 214 197 182	72 64 54 54 49	31 27 26 26 26	19 18 18 20 19
16 17 18 19 20	194 190 197 197 205	244 253 253 253 244	164 171 171 178 171		190	258 239 231 205 205	239 222 214 205 205	29 27 27 27 27	168 154 154 144 160	44 41 37 37 37	23 23 20 19 19	22 28 34 24 24
21 22 23 24 25	154 167 182 222 222	244 244 244 235 209	178 178 178 178 186			205 205 205 205 205 205	197 190 190 182 190	27 27 27 29 33	164 164 130 96 82	29 28 29 28 30	19 19 18 18 17	26 27 29 29 34
26 27 28 29 50 31	231 231 231 231 222 231	201 197 194 194 186	186 186 178 175 175 175] =	209 209 209 205 209 222	175 154 128 123 117	37 39 59 92 101 112	74 62 57 52 45	32 32 33 34 32 34	16 16 15 15 14 14	39 42 47 76 84

Month	Second- foot-days	Maximm	Minimum	Mean	Run-off in acre-feet
October	5,259 7,089 5,346	231 253 186	104 186 131	170 236 172	10,430 14,060 10,600
Calendar year 1936	82,606	2,300	38	226	163,800
January February March April Hay Jun Jun Jun Jul Jul August September	5,425 5,291 6,557 6,154 1,781 3,915 1,215 751 822	258 267 117 226 72 35 84	- 117 27 45 28 14 14	175 189 212 205 57.5 130 39.2 24.2 27.4	10,760 10,490 13,000 12,210 3,530 7,770 2,410 1,490 1,630
Water year 1936-37	49,605	267	14	136	98,380

^{*}Discharge measurement.

North Fork of Salmon River at North Fork, Idaho

Location.- Staff gage, lat. 45°25', long. 113°59', in SW\u00e4 sec. 16, T. 24 N., R. 21 E., 750 feet above bridge on Salmon River highway, a quarter of a mile above mouth, and a quarter of a mile northeast of North Fork.

Drainage area .- 214 square miles.

Records available. October 1929 to September 1937. April to September 1912 at site 6 miles upstream and above mouth of Spring Creek.

Extremes.- Maximum discharge observed during year, 348 second-feet May 19 (gage height, 2.27 feet, on auxiliary gage 200 feet downstream); minimum, 22 second-feet Aug. 26, Sept. 18, 19. A smaller discharge may have occurred during winter. 1929-37: Maximum discharge, 901 second-feet June 13, 1933 (gage height, 4.40 feet); minimum, 11 second-feet Dec. 8, 1932 (gage height, 0.06 foot).

Remarks. - Records good except those for periods of ice effect, Nov. 29 to Dec. 7, Jan. 3 to Feb. 28, which were computed on basis of one discharge measurement, weather records, and records for other stations in Salmon River Basin, and are fair. Discharge for Apr. 19, Sept. 4 interpolated. No diversions. Gage read once daily. Gage heights were obtained from auxiliary gage 200 feet downstream, as permanent gage was inaccessible.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	42 42 42 42 42 42	44 41 38 37 43	45 50 50 40 45	30 30		38 35 36 38 38	40 38 37 35 36	57 76 103 125 158	230 218 218 230 205	87 84 79 82 82	50 49 45 43 42	26 26 28 28 27
6 7 8 9 10	43 42 43 42 41	43 39 42 42 42	50 55 54 46 45		30	35 45 43 38 38	37 36 36 37 38	170 170 181 181 205	205 181 193 218 218	89 78 89 82 76	36 35 31 33 35	28 29 30 28 27
11 12 13 14 15	40 42 41 40 42	50 51 57 54 52	38 36 41 45 48			38 38 35 35 37	40 38 44 49 57	205 193 205 218 257	205 193 193 181 170	76 74 72 79 73	35 35 32 32 32	26 25 25 26 24
16 17 18 19 20	41 42 38 38	47 42 39 42 45	51 47 47 40 47	3.0		39 38 37 40 38	52 48 48 48 49	257 272 272 272 348 316	170 181 170 158 170	70 63 64 58 53	29 28 28 29 28	24 24 22 22 22 26
21 22 23 24 25	38 38 40 42 40	50 50 44 54 53	40 39 38 38 38		35	37 36 35 36 35	57 48 46 44 46	286 286 301 301 316	158 158 154 145 143	47 44 46 43 46	27 27 25 24 24	28 30 30 28 30
26 27 28 29 30 31	42 42 42 42 41 43	48 42 36 35 40	36 41 37 32 30 30] =	35 34 33 35 35 35	49 66 70 60 60	316 316 332 316 286 257	135 127 115 104 101	53 50 46 50 46 50	22 24 25 28 27 26	30 30 32 32 31

43	_	- 30	1_			30 1		207		2 2	0
	*			Seco		Maximum	Minimum	w	Per square	Ru	n-off
	Month			foot-	Cays :	HAXIMUM	HINIMUM	Mean	mile	Inches	Acre-feet
October					276	43	38	41.2	0.193	0.22	2,530
November				1,	342	57	35	44.7	.209	.23	2,660
December				1,	319	55	30	42.5	.199	.23	2,620
Calendar	year 193	6		41,	163	670	-	112	.523	7.13	81,640
January				ĺ	930	_	_	30.0	.140	.16	1.840
February				l	880	_	_	31.4	.147	.15	1,750
March					148	45	33	37.0	173	.20	2.280
April					389	70	35	46.3	.216	.24	2,760
May					282	348	57	235	1.10	1.27	14,440
June					247	230	101	175	.518	.91	10,410
July					031	89	43	65.5	.306	.35	4.030
August					986	50	22	31.8	.149	.17	1,960
September.					822	32	22	27.4	.128	.14	1,630
Water yes	r 1936-3	7	•••	24,	652	348	22	67.5	.315	4.27	48,910

Middle Fork of Salmon River near Cape Horn, Idaho

Location. Water-stage recorder, lat. 44°25', long. 115°18', in sec. 34, T. 13 N., R. 11 E., 1,100 feet below Little Beaver Creek, half a mile below junction of Marsh and Beaver Creeks, and 1½ miles northwest of Cape Horn.

Drainage area .- 138 square miles.

Records available .- September 1928 to September 1937.

Extremes. - Maximum discharge during year, 942 second-feet May 19 (gage height, 4.65 feet); minimum, probably occurred during January.

1928-37: Maximum discharge, 2,340 second-feet June 9, 1933 (gage height, 6.26 feet); minimum, 35 second-feet (estimated), Nov. 26-30, 1929. A smaller discharge may have occurred during winter.

Remarks. - Records good, except those for periods of ice effect or missing gage heights, Nov. 3, 4, 9-18, Nov. 21 to Apr. 19, July 16-24, which were computed on basis of weather records and records for other stations in Salmon River Basin and are poor. No diversions above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.0	20	3.0	195	4.0	575
2.2	40	3.2	254	4.2	680
2.4	68	3.4	322	4.4	790
2.6	103	3.6	398	4.6	910
2.8	145	3.8	482	4.8	1,040

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	73 73 73 75 76	75 65 50 75 76						145 182 248 298 359	514 500 527 522 482	248 229 220 209 206	107 107 105 99 98	75 73 73 83 87
6 7 8 9 10	75 75 75 73 73	76 71 58 70 75					65	402 439 482 527 537	443 418 431 551 541	203 192 190 185 174	96 96 94 94 94	80 76 78 80 76
11 12 13 14 15	71 71 73 73 73	75 75 76 80 80					70 80 90	541 570 615 680 696	465 439 410 394 382	169 164 159 164 162	92 92 89 89 87	75 75 75 73 73
16 17 18 19 20	71 71 71 73 71	80 80 80 76 78					85 80 80 80 92	708 752 802 910 790	410 414 386 375 580	155 150 145 140 135	87 85 83 82 82	71 71 71 71 73
21 22 23 24 25	70 68 73 73 75	75 70 60 60 65					96 87 85 82 87	740 784 850 820 844	478 448 406 375 348	130 125 125 125 127	80 80 78 78 80	73 73 75 73 73
26 27 28 29 30 31	71 73 71 71 73 75	60 50 50 50 50					109 132 121 109 117	832 814 850 790 680 575	322 301 284 277 261	123 117 111 109 107	80 78 78 78 78 76	73 73 75 78 73

***	Second-	w			Per	Run-off		
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet	
October November December	2,252 2,060 2,015	76 80 =	68 50	72.6 68.7 65.0	0.526 .498 .471	0.61 .56 .54	4,470 4,090 4,000	
Calendar year 1936	81,791	1,720	50	223	1.62	22.03	162,200	
January February March April Hay June July August September	1,705 1,680 2,015 2,462 19,262 12,684 4,905 2,722 2,248	132 910 580 248 107 87	145 261 107 76 71	55.0 60.0 65.0 82.1 621 423 158 87.8 74.9	.599 .435 .471 .595 4.50 3.07 1.14 .636 .543	46 .45 .54 .66 5.19 3.42 1.31 .73	3,380 3,330 4,000 4,880 38,210 25,160 9,730 5,400 4,460	
Water year 1936-37	56,010	910	-	153	1.11	15.08	111,100	

Middle Fork of Salmon River near Meyers Cove, Idaho

Location.- Staff gage, lat. 44°57', long. 114°44', in sec. 27, T. 19 N., R. 14 E., at the Geo. D. Crandall ranch, 500 feet below Brush Creek and 15 miles northwest of Meyers Cove.

Drainage area. - 2,020 square miles.

Records available. - July 1931 to September 1937.

Extremes. Maximum discharge observed during year, 6,610 second-feet May 27, 28; maximum gage height, 5.49 feet May 27; minimum discharge probably occurred during winter.

1931-37: Maximum discharge observed, 17,000 second-feet June 10, 1933 (gage height, 8.10 feet); minimum not determined.

Remarks.- Records good except those for periods of ice effect, Nov. 14-18, Nov. 20 to Mar. 26, which were computed on basis of weather records and records for other stations in Salmon River Basin and are fair. Gage read once daily.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

			,
1.9	530	3.9	2,870
2.2	745	4.2	3,430
2.4	910	4.5	4,050
2.7	1,200	4.8	4,720
3.0	1,540	5.1	5,470
3.3	1,920	5.4	6,310
3.6	2.370	5.7	7,225

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	708 708 670 708 670	670 635 670 670 745					600 600 600 600 565	1,790 2,140 2,530 3,050 3,630	4,270 4,050 4,050 4,050 3,840	2,140 1,990 1,920 1,790 1,660	868 525 868 525 825	600 600 600 600 708
6 7 8 9 10	670 670 670 670 670	670 670 530 530 530					600 565 565 600 600	4,050 4,270 4,050 4,270 4,270	3,630 3,430 3,240 3,840 3,840	1,540 1,420 1,540 1,660 1,540	825 785 745 745 745	708 670 670 635 635
11 12 13 14 15	670 670 670 670	530 530 565 650 680				600	670 745 910 1,150 1,150	4,490 4,490 4,270 4,960 5,470	4,050 3,630 3,430 3,240 3,240	1,420 1,540 1,600 1,540 1,540	745 708 708 708 745	635 600 600 565 565
16 17 18 19 20	670 670 670 670 670	680 700 700 670 650					1,200 1,200 1,100 1,150 1,100	5,470 5,740 5,740 6,020 6,310	3,240 3,240 3,240 2,870 2,870	1,360 1,200 1,150 1,100 1,050	708 708 670 670 635	600 600 565 635 670
21 22 23 24 25	670 670 670 670 635	650 640 620 600 600			i		1,150 1,200 1,100 1,050 1,150	6,310 6,020 6,020 6,020 5,740	3,630 3,840 3,630 3,050 2,870	1,000 1,000 955 910 910	635 635 635 635 635	708 670 670 635 635
26 27 28 29 30 31	635 635 600 600 635 670	580 560 540 520 500				600 530 530 565 600	1,200 1,420 1,600 1,790 1,720	6,310 6,610 6,610 6,310 5,470 4,960	2,700 2,530 2,370 2,370 2,140	1,050 1,000 955 910 868 868	635 600 600 600 600 600	635 635 600 600 600

Month	Second-	Maximum	Minimum	Mean	Per square	Ru	n-off
11011011	foot-days		1	110841	mile	Inches	Acre-feet
October	20,604	708	600	665	0.329	0.38	40,870
November	18,485	745	500	616	.305	.34	36,660
December	17,980	-	- 1	580	·257	.33	35,660
Calendar year 1936	739,910	14,700	-	2,022	1.00	13.63	1,468,000
January	16,120	1	-	520	.257	.30	31,970
February	15.680	_	-	560	.277	.29	31,100
March	18,425	_	-	594	.294	.34	36,550
April	29,650	1.790	565	988	.489	.55	58.810
May	153,390	6,610	1.790	4.948	2.45	2.82	304,200
June	100,420	4.270	2,140	3,347	1.66	1.85	199.200
July	41,126	2,140	868	1.327	657	.76	81,570
August	21.871	868	600	706	•350	.40	43,380
September	18,849	708	565	628	.311	.35	37,390
Water year 1936-37	472,600	6,610	-	1,295	.641	8.71	937,400

Bear Valley Creek near Cape Horn, Idaho

Location.- Water-stage recorder in about sec. 31, T. 13 N., R. 10 E., 250 feet below Fir Creek, 5 miles above mouth, and 7 miles northwest of Cape Horn.

Drainage area. - 180 square miles.

Records available .- September 1921 to September 1937.

Extremes. Maximum discharge during water year 1935-36, 2,500 second-feet May 15 (gage height, 4.82 feet); minimum discharge recorded, 41 second-feet Nov. 10 (gage height, 1.01 feet).

Maximum discharge during water year 1936-37, 1,190 second-feet May 19 (gage height, 3.45 feet); minimum probably occurred during January.

1921-37: Maximum discharge, 3,450 second-feet June 9, 1933 (gage height, 5.49 feet); minimum, 28 second-feet Nov. 11, 1931.

Remarks. - Records good except those for periods of ice effect or missing gage heights, Nov. 4, 5, 11-13, Nov. 15, 1935, to Apr. 20, 1936 (computed on basis of one discharge measurement, weather records, and records for Johnson Creek near Yellow Pine and other stations in Salmon River Basin) and those for Nov. 3, 4, Nov. 8, 1936, to Apr. 21, 1937 (computed on basis of one discharge measurement, weather records, and records for other stations in Salmon River Basin) which are poor. Discharge for Aug. 23, 1936, interpolated. No regulation or diversions above station.

Rating table, water years 1935-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Apr. 21, 1936, to Sept. 30, 1937 1.00 1.30 1.60 2.80 45 730 3.40 3.70 4.00 930 1,150 1,390 1,660 1,960 2,280 93 165 1.90 4.30

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	War.	Apr.	Hay	June	July	Aug.	Sept.
1 2 3 4 5	84 84 84 82 82	101 98 86 80 90					80 80 80 80 80	854 895 965 1,110 1,150	1,570 1,660 1,310 1,160 1,040	260 250 242 232 221	128 126 143 138 128	106 106 110 131 128
6 7 8 9 10	84 86 84 84 84	94 101 94 92 73					80 80 80 80 80	895 802 930 1,080 1,270	965 1,350 1,480 1,040 895	215 212 215 272 232	121 119 116 114 114	124 116 110 108 106
11 12 13 14 15	82 92 101 94 94	90 100 100 94 95					90 100 110 130 160	1,440 1,620 1,810 2,060 2,280	814 776 743 694 664	221 215 202 198 192	154 168 152 133 121	104 101 106 108 112
16 17 18 19 20	96 92 90 90	100 100 95 90 86					190 250 350 450 550	2,060 1,710 1,570 1,480 1,390	646 577 538 489 458	180 174 168 160 157	116 112 110 108 108	112 108 106 104 101
21 22 23 24 25	86 80 74 82 86	85 85 85 85 85					688 700 834 895 895	1,190 1,040 1,000 1,040 1,080	422 396 372 353 358	152 152 152 152 146	108 108 104 101 104	99 97 97 97 97
26 27 28 29 30 31	82 82 82 84 80 82	85 85 85 80 80					895 821 762 756 795	1,190 1,270 1,390 1,350 1,310 1,350	330 308 288 280 268	143 141 136 133 131	106 106 106 106 106 106	97 97 97 97

Discharge, in second-feet, of Bear Valley Creek near Cape Horn, Idaho, 1935-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jur	.e	July	Aug	. Sep	t.
1 2 3 4 5	97 95 97 95 95	76 57 50 80 84						206 26- 344 43' 510	3	572 555 566 550 500	228 215 205 198 195		95 95 93 89 84	74 72 72 80 101
6 7 8 9 10	95 91 89 87 87	84 72 65 75 85					75	58: 64: 65: 75: 80:	3	468 442 432 516 718	186 180 174 171 165		82 78 74 72 74	93 85 84 84 82
11 12 13 14 15	85 84 82 80 78	85 85 85 90 90					90 150 180	75 77 84 96 93	5	610 195 158 116 101	160 157 154 152 149		74 72 71 71 69	80 80 80 80 80
16 17 18 19 20	74 72 72 71 71	90 90 90 90					170 160 160 160 170	956 961 1,000 1,086 898		127 168 586 122 570	143 141 136 131 128		69 68 69 69 71	78 80 80 80 89
21 22 23 24 25	69 68 68 71 76	85 80 70 70 75					190 186 180 165 171	828 828 844 788 85		304 442 382 539 513	124 121 121 119 121		71 72 74 76 80	91 87 87 87 85
26 27 28 29 30 31	72 71 71 71 72 76	65 60 60 60					183 202 205 198 192	96 84 84 78 71 62	3	292 276 260 246 242	119 112 106 104 99		76 74 74 74 74 74	85 85 85 85 84
	-	Month			cond- t-days	Maximum	Minim	2m 1	lean	Pe squa mil	ire -	Runches	n-off Acre-fe	et
Nov	ober 193				2,659 2,698 2,170	101 101		74 73	85.8 89.9 70.0	0.4		0.55 .56 .45	5,2° 5,3° 4,3°	70 50
0	alendar	year 19	35	🗀	84,259	1,500		-	231	1.2	28]	7.41	166,8	00
Feb Mar Apr May Jur Jul Aus	usry 19; orusry ch il y ust				2,325 2,175 2,635 11,221 40,581 22,234 5,787 3,690 3,179	895 2,280 1,660 272 168	86 26 13 14	02 1, 68 31 01	75.0 75.0 85.0 374 309 741 187 119	2.0 7.2 4.1 1.0	27	.48 .43 .54 2.32 8.38 4.60 1.20 .76	4,6,4,5,2,2,2,2,2,4,1,1,4,1,4,1,4,1,4,1,4,1,4,1	10 30 60 90 .00 80
w	later y ea	r 1935-	36	1	01,354	2,280		-	277	1.8	54 2	20.93	201,0	00
Nov	ober 193 ember			::	2,480 2,298 2,325	97 90 		68 50	80.0 76.6 75.0	.4	126	0.51 .48 .48	4,9 4,5 4,6	10
1	alendar	-			00,930	2,280		50	276	1.8		20.84	200,2	\neg
Mar Apr May Jur Jul Aug	nuary 193° ch il y ust tember				2,015 1,960 2,325 4,012 23,256 13,568 4,609 2,358 2,495	205 1,080 718 228 95	2	05 42	65.0 70.0 75.0 134 750 452 149 76.1 83.2	4.1 2.5 4.4	51 328 123 162	.42 .41 .48 .83 4.81 2.80 .95 .49	4,0 3,8 4,6 7,9 46,1 26,9 9,1 4,6	90 310 60 .30 10 .40
L	ater yes				63,701	1,080			175			13.18	126,4	: 0 0
N	ote Re	anda fo		-227 103	5-36	nongada +	hogo mih	1 tahad	in Wet	an_9	mni = 1	Penen	01.9	

South Fork of Salmon River near Knox. Idaho

Location.- Staff gage, lat. 44°39', long. 115°42', in NW\(\frac{1}{4}\) sec. 11, T. 15 N., R. 6 E., an eighth of a mile below Curtis Creek, three-quarters of a mile above Warm Lake Creek, 1\(\frac{1}{4}\) miles southwest of Knox, and 21 miles northeast of Cascade.

Drainage area .- 92 square miles.

Records available .- September 1928 to September 1937.

Extremes. - Maximum discharge observed during year, 580 second-feet May 25; maximum gage height observed, 3.43 feet Feb. 25, during period of ice effect; minimum discharge, not determined.

not determined.

1928-37: Maximum discharge observed, 1,560 second-feet June 9, 1933 (gage height, 4.69 feet); minimum, 16 second-feet Feb. 17, Aug. 19, 20, 1931.

Remarks.- Records fair. Gage read three or four times a week. Discharge for Oct. 20 to May 10, May 19, 22-24 computed on basis of weather records and records for station near Warren and for Johnson Creek at Yellow Pine. No diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*30						1	110	*348	*137	*50	32
2 3	30				ĺ		11	150	358	135	51	*32
3	*30]		ļ		11	200	*339	121	*48	32
4	*30	[[[1	11	250	*320	*117	46	*32
5	*29							275	*302	113	*44	*33
6	*29							275	*283	*108	42	33
7	29				i	ì	11	275	264	*103	*42	33
8	29						35	275	*311	98	*41	*32
9	*29					i	11	300	358	94	*40	32
10	29						11	300	399	*91	40	*31
11	*28						11	300	*349	*87	*40	30
12	*28						11	*319	*298	84	40	*29
13	27	1				1	11	338	248	80	*39	28
14	*27				ļ	1	11	*358	231	*79	38	*28
15	27						1	378	215	78	*38	28
16	*27						\	*407	215	*74	38	*28
17	27				Į.	ļ	11	*435	*283	69	*38	*27
18	27					1	11	464	*352	*68	38	27
19	, 28					l	1	550	420	*67	*37	*30
20	1							486	*379	66	*37	32
21	1						11	509	338	*65	36	*32
22	i				1	l	11	575	*293	64	*35	33
23	1						85	575	248	* 62	#33	*32
24	1						11	540	231	59	32	30
25	27							580	*211	56	*32	*30
26						[11	*544	*190	60	32	30
27	1 1						11	509	170	* 58	*32	*30
28	1					l	11	*464	*160	56	32	*30
29	1				-	1	11	420	*149	*54	32	30
30	1				-	1	1 7	*379	139	*51	*32	*30
31	,	-			-	l	I -	338	-	49	*32	-

<u>.</u>	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	864 780 806	30 - -	-	27.9 26.0 26.0	0.303 .283 .283	0.35 .32 .33	1,710 1,550 1,600
Calendar year 1936 ·····	49,955	1,340	_	136	1.48	20.23	99,100
January February March April Ayril June July August September	744 756 930 1,800 11,878 8,401 2,503 1,187 916	580 420 137 51 33	- - 110 139 49 32 27	24.0 27.0 30.0 60.0 383 280 80.7 38.3 30.5	.261 .293 .326 .652 4.16 3.04 .878 .416 .332	.30 .31 .38 .73 4.80 3.39 1.01 .48 .37	1,480 1,500 1,840 3,570 23,560 16,660 4,960 2,350 1,820
Water year 1936-37	31,565	580	-	86.5	.940	12.77	62,600

^{*}Discharge interpolated.

South Fork of Salmon River near Warren, Idaho

Location. - Staff gage, lat. 45°09', long. 115°35', in SE\ sec. 15, T. 21 N., R. 7 E., 500 feet below Elk Creek, 900 feet north of Elk Creek power plant, and 8 miles southeast of Warren.

Drainage area. - 1,160 square miles.

Records available. - July 1931 to September 1937.

Extremes. Maximum discharge observed during year, 7,260 second-feet May 19 (gage height, 8.55 feet); minimum probably occurred during period of ice effect in January.

1931-37: Maximum discharge observed, 20,000 second-feet June 9, 1933 (gage height, 13.16 feet), from rating curve extended above 8,000 second-feet; minimum, 200 second-feet sometime during estimated period Dec. 9-15, 1932, and Jan. 26, 1936; minimum gage height, 2.35 feet Jan. 28, 1936.

Remarks. - Records good except those for periods of ice effect Nov. 29 to Dec. 10, Jan. 1-31, which were computed on basis of observer's notes, weather records, and records for other stations in Salmon River Basin. Gage read twice daily.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.50	230	4.90	1,690	6.90	4,180
2.90	340	5.30	2,090	7.30	4,850
3.30	495	5.70	2,530	7.70	5,560
3.70	715	6.10	3.020	8.10	6,300
4.10	1,000	6.50	3,560	8.50	7,060
4.50	1,330				

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	375 375 375 375 392	375 325 255 410 430	250 300 300 300 300 300		358 375 375 375 358	358 375 375 358 358	430 472 450 410 430	1,330 1,990 2,530 2,890 3,710	4,020 4,510 4,850 4,180 3,860	1,990 1,890 1,790 1,600 1,510	628 628 600 572 545	375 375 375 375 450
6 7 8 9 10	375 375 375 375 375	410 340 255 280 325	350 350 350 350 300		340 358 358 358 340	358 375 358 358 392	410 392 392 410 430	3,860 3,860 3,710 3,860 4,020	3,560 3,420 3,420 4,510 5,020	1,420 1,330 1,330 1,240 1,160	520 495 495 495 472	410 392 392 375 375
11 12 13 14 15	358 358 358 358 358	358 358 358 358 358	280 325 325 375 375		340 358 340 325 340	410 410 410 430 450	430 430 655 1,240 1,600	3,860 3,710 4,020 5,200 5,560	4,180 3,710 3,420 3,280 3,280	1,160 1,080 1,000 1,000 1,000	472 472 450 450 450	375 358 358 358 358 358
16 17 18 19 20	375 375 375 3 7 5 358	392 410 375 340 310	375 375 375 358 358		358 358 325 325 295	472 450 430 410 392	1,330 1,080 1,000 1,000 920	5,740 5,920 6,680 7,060 5,920	3,560 3,560 3,150 3,280 5,920	920 885 850 815 780	430 430 410 410 410	358 340 340 340 358
21 22 23 24 25	358 358 358 375 375	310 310 310 255 268	358 375 3 7 5 375 375		340 358 375 358 358	375 410 410 392 392	1,080 1,000 920 815 850	5,740 6,300 6,490 6,300 6,680	5,020 4,340 3,560 3,150 2,890	748 715 685 685 685	392 392 392 392 392 392	410 392 375 375 358
26 27 28 29 30 31	375 375 375 358 358 392	280 268 242 250 250	358 358 340 310 295 295		340 358 340 - - -	375 392 392 392 410 410	1,160 1,690 1,510 1,240 1,160	6,680 6,870 6,870 6,110 5,020 4,340	2,650 2,530 2,420 2,310 2,200	850 748 685 655 628 600	392 375 375 375 375 375 592	358 358 358 358 358

	Second-	l			Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	11,489 9,765 10,485	392 430 375	358 242 250	371 326 338	0.320 .281 .291	0.37 .31 .34	22,790 19,370 20,800
Calendar year 1936	583,552	12,600	200	1,594	1.37	18.71	1,157,000
January February Harch April Hay June July August September	10,075 9,786 12,279 25,336 152,830 109,760 32,434 14,078 11,137	375 472 1,690 7,060 5,920 1,990 628 450	295 358 392 1,330 2,200 600 375 340	325 350 396 845 4,930 3,659 1,046 454 371	.280 .302 .341 .728 4.25 3.15 .902 .391 .320	.32 .31 .39 .81 4.90 3.51 1.04 .45	19,980 19,410 24,360 50,250 303,100 217,700 64,330 27,920 22,090
Water year 1936-37	409,454	7,060	-	1,122	967	13.11	812,100

East Fork of South Fork of Salmon River at Stibnite. Idaho

Location.- Water-stage recorder, lat. 44°54', long. 115°19', in about sec. 14, T. 18 N., R. 9 E., 30 feet below mouth of Meadow Creek, half a mile northeast of Stibnite post office, and 10½ miles above mouth of Johnson Creek.

Drainage area .- 19.5 square miles.

Records available .- June 1928 to September 1937.

Extremes.- Maximum discharge during year, 116 second-feet May 27 (gage height, 3.11 feet);
minimum discharge observed, 2 second-feet Oct. 29 (gage height, 1.71 feet). A smaller
discharge may have occurred during winter.
1928-37: Maximum discharge, 369 second-feet June 14, 1933 (gage height, 4.49 feet);
minimum, that of Oct. 29, 1938.

Remarks.- Records good except those for November to April, which are fair. Discharge during Deriods of ice effect or missing gage heights, Nov. 2 to Apr. 12, Apr. 14-30, Sept. 28-30, computed on basis of weather records, records for other stations in Salmon River Basin, and flow data furnished by Yellow Pine Co. Slight regulation by storage reservoir (capacity about 700 acre-feet) on South Fork of Meadow Creek and a diversion from Meadow Creek of about a third of a second-foot for transporting mine tailings. Gageheight record furnished by Yellow Pine Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	9 9 8 9	*7 - - *8						22 28 36 44 50	66 67 71 68 60	29 28 25 23 22	12 12 11 11 11	9 9 9 11 9
6 7 8 9 10	9 8 8 8	- - - -					7	50 45 47 50 49	56 51 52 64 65	24 24 23 22 21	11 11 11 11 11	9999
11 12 13 14 15	8 9 8 8	-) 11	43 43 50 68 71	57 56 49 46 46	21 20 20 19 19	11 11 10 10	9 9 8 9
16 17 18 19 20	8 7 7 8	-						74 81 83 84 76	54 52 48 48 70	18 18 17 16 16	9 9 9 9	8 9 9 9
21 22 23 24 25	8 7 8 8 7	†10 - - -	*5				15	73 84 86 88 98	61 57 51 47 42	15 13 13 14 13	9999	9 9 9 9
26 27 28 29 30 31	7 7 10 9 7	-				*4]	97 98 99 96 78 71	39 36 34 34 32	13 13 12 12 12 12	899989	8888

Month	Second- foot-days	Vaximm	Minimum	Mean	Run-off in
October November December		10 - -	7 - -	8.0 7 7	492 417 430
Calendar year 1936	9,185	190	-	25.1	18,210
January. February March. April May. June. July August September.	196 217 350 2,052 1,579 567 307	- - - 99 71 29 12	- - - 22 32 12 8 8	7 7 7 11.7 66.2 52.6 18.3 9.9 8.8	430 389 430 694 4,070 3,130 1,120 609 524
Water year 1936-37	6,424	99	-	17.6	12,740

*Determined from staff-gage reading.

†Discharge measurement.

East Fork of South Fork of Salmon River near Stibnite, Idaho

Location. - Staff gage, lat. 44°56', long. 115°20', in sec. 34, T. 19 N., R. 9 E., 200 feet below mouth of Sugar Creek, 3 miles north of Stibnite post office, and 8½ miles above mouth of Johnson Creek.

Drainage area .- 42.5 square miles.

Records available. - June 1928 to September 1937.

Extremes. Maximum discharge observed during year, 201 second-feet May 25 (gage height, 1.82 feet); minimum not determined, occurred during period of ice effect. 1928-37: Maximum discharge observed, 783 second-feet June 15, 1933 (gage height, 3.51 feet); minimum discharge observed, 10 second-feet June 15, 1936 and Apr. 7, 1936. A smaller discharge may have occurred during periods of ice effect.

Remarks.- Records fair. Discharge for Oct. 14-21, Oct. 23 to Nov. 21, Nov. 23 to Mar. 8, Mar. 10-13, May 6-15, June 1, 3, 4, 6, 7, 10, 16-26, July 1-12, 14-23, July 31 to Aug. 16, Sept. 4, 6-30, computed on basis of weather records and records for other stations in Salmon River Basin. Discharge for Mar. 15-20, 22-27, 29-31 interpolated. Some regulation by Yellow Pine Co.'s power plant upstream and in auxiliary storage reservoir (capacity about 700 acre-feet) on South Fork of Meadow Creek. Gage read once daily. Gage-height record furnished by Yellow Pine Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	20 20 20 19 19					12 12 12 12 12	13 13 13 14 14	37 38 61 70 100	125 126 140 135 119	67 65 60 57 54	28 27 26 25 25	17 17 17 21 19
6 7 8 9 10	19 19 18 19					12 12 12 13 12	13 14 15 13 14	105 100 100 110 105	115 110 111 119 125	56 54 52 50 49	24 24 24 23 23	17 17 17 18 17
11 12 13 14 15	18 18 18 18	> 16				12 12 12 12 12	14 14 15 17 21	95 95 105 130 140	111 108 105 103 101	47 46 45 45 43	23 22 22 21 21	17 17 17 16 16
16 17 18 19 20	18 18 16 17 18					12 12 12 12 12	22 22 21 21 23	153 164 164 153 153	115 110 105 105 150	41 41 39 36 36	20 19 19 19 19	16 16 16 16 17
21 22 23 24 25	18 18 18 18	13				12 12 12 12 12	26 29 26 23 22	164 164 164 176 188	145 125 115 115 94	34 31 30 32 32	19 18 18 18 18	17 17 17 17 16
26 27 28 29 30 31	17 17 17 17 17	13				12 12 12 12 12 13	38 40 42 26 23	188 188 176 164 153 132	88 60 78 74 74	30 30 29 26 26 26	18 18 18 17 17	16 16 16 16 16

- 13	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	560 453 403	20 - -	16 - -	18.1 15.1 13	0.426 .355 .306	0.49 .40 .35	1,110 899 799
Calendar year 1936	19,583	452	-	53.5	1.26	17.14	38,840
January February Harch April Hay July July August September	341 336 374 620 4,035 3,326 1,309 650 505	13 42 188 150 67 28 21	12 13 37 74 26 17 16	11 12 12.1 20.7 130 111 42.2 21.0 16.8	.259 .282 .285 .487 3.06 2.61 .993 .494	.30 .29 .33 .54 3.53 2.91 1.14 .57	676 666 742 1,230 8,000 6,600 2,600 1,290 1,000
Water year 1936-37	12,912	188	-	35.4	.833	11.29	25,610

East Fork of South Fork of Salmon River near Yellow Pine, Idaho

Location. - Water-stage recorder, lat. 44°58', long. 115°27', in NE½ sec. 27, T. 19 N., R. 8 E., 200 feet above Forest Service highway bridge, 1½ miles east of Yellow Pine, 1½ miles above Quartz Creek, 2 miles below Profile Creek, and 2.8 miles above mouth of Johnson Creek.

Drainage area .- 104 square miles.

Records available .- August 1928 to September 1937.

Extremes. Maximum discharge during year, 600 second-feet May 27 (gage height, 3.17 feet);

minimum not determined, occurred during period of ice effect.

1928-37: Maximum discharge, 2,050 second-feet June 14, 1933 (gage height, 5.26 feet); minimum discharge recorded, 25 second-feet Oct. 23, 1935. A smaller discharge may have occurred during periods of ice effect.

Remarks. - Records good except those for periods of ice effect or missing gage heights, Nov. 3 to Apr. 17, Apr. 19-24, 26-30, May 1, 3-8, which were computed on basis of one discharge measurement, weather records and records for other stations in Salmon River Basin, and are fair. Discharge for July 5-10, 12 interpolated. Slight regulation by Yellow Pine Co.'s power plant on this stream and in small auxiliary storage reservoir on South Fork of Meadow Creek.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	46					32	90	326	191	81	52
2	45	35					32	140	341	182	79	52
3	44	50			1	[32	200	380	174	76	52
4	50	45	ļ		ļ		30	250	372	165	74	58
5	51	45					30	300	334	159	72	58
6	49	45					30	300	308	154	71	52
7	47	40	ļ		1		30	300	301	148	70	52
8	47	32	1	i	l		32	300	308	142	70	51
9	45	55		Į	l]	32	330	372	136	68	54
10	46	40					32	315	380	131	68	50
11	45	40					32	294	334	125	68	50
12	45	40	1		l		52	273	326	121	65	50
13	44	40				1	45	301	308	117	65	49
14	46	40	1		!		60	360	301	121	64	47
15	47	40					80	384	301	117	62	46
16	46	40					70	388	319	112	60	45
17	46	40				1	65	414	312	108	59	45
18	45	40				l	64	441	294	106	58	44
19	47	40			i		65	460	287	100	58	45
20	47	40					70	396	405	100	58	50
21	46	38					Во	384	376	97	56	47
22	46	*36					75	432	348	93	54	50
23	46	35				1	70	490	319	89		47
24	47	35			1	ĺ	60	475	290	91	55 55	49
25	47	35					62	524	267	91	55	46
26	46	30					85	512	250	91-	54	45
27	46	30			l	1	120	529	234	e 6	52	45
2e	47	30			1	l	100	534	218	82	54	45
29	47	30			1		90	465	215	79	52	45
30	46	30			l		85	392	206	77	54	44
31	47	-			l	1	~	341		77	54	

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	1,439 1,122 992	51 46 -	44 30 -	46.4 37.4 32	0.446 .360 .308	0.51 .40 .36	2,850 2,230 1,970
Calendar year 1936	51,409	1,170	-	140	1.35	18.39	102,000
Jamuary	868	-	-	28	.269	.31	1,720
February	840	-	-	30	.288	.30	1,670
March	930	_	_	30	.288	.33	1,840
April	1.722	120	30	57.4	.552	.62	3,420
May	11,314	534	90	365	3.51	4.05	22,440
June	9,332	405	206	311	2.99	3.34	18,510
July	3,662	191	77	118	1.13	1.30	7,260
August	1,941	81	52	62.6	.602	-69	3,850
September	1,465	58	44	48.8	.469	.52	2,910
Water year 1936-37	35,627	534	-	97.6	.938	12.73	70,670

^{*}Discharge measurement.

Johnson Creek at Yellow Pine, Idaho

Location.- Water-stage recorder, lat. 44°58', long. 115°30', in NE} sec. 29, T. 19 N., R. 8 E., 700 feet above mouth and a quarter of a mile southwest of Yellow Pine post office.

Drainage area. - 213 square miles.

Records available .- August 1928 to September 1937.

Extremes. Maximum discharge during year, 1,720 second-feet May 19 (gage height, 4.42 feet); minimum, 23 second-feet Nov. 3 (gage height, 0.71 foot).

1928-37: Maximum discharge, 5,150 second-feet June 9, 1933 (gage height, 7.62 feet); minimum, 22 second-feet Nov. 30, 1933; minimum gage height, that of Nov. 3, 1933

Remarks.- Records good except those for January 7 to Feb. 4, which are fair. Discharge for Jan. 10, 17, 24, 31 computed on basis of once-daily reading of staff; for periods of missing gage heights, Jan. 7-9, 11-16, 18-23, 25-30, Feb. 1-4, on basis of weather records and records for stations on nearby streams. During the late fall of 1936, the Bureau of Reclamation cut an intermountain canal to divert a small flow of water from a tributary of Johnson Creek to Deadwood River Basin for supplemental storage in Deadwood Reservoir. Measurements of July 14 and 25 indicated flow in diversion of 4.82 and 1.76 second-feet, respectively.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet) Oct. 1 to Jan. 31 Feb. 5 to Sept. 30

30 41	0.70 .90	23 41	1.70 1.90	201 261	2.50 2.70	500 600	3.90	1,080 1,340
54 69	1.10	67 102	2.10 2.30	330 410	2.90 3.10	710 8 3 0	4.10 4.50	1,480 1,800

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	64 64 63 62 64	63 42 38 68 68	40 48 48 42 42	41 44 50 51 53	48 52 52 52 52	54 56 54 54 56	61 63 59 57 60	242 326 450 590 734	800 830 890 830 710	362 334 312 291 284	102 102 98 94 89	56 54 53 57 69
6 7 8 9 10	63 62 62 62 62	64 57 46 54 57	50 53 53 53 44	49 45 54	48 51 51 47 49	56 54 54 56 57	59 54 59 64 60	800 800 800 920 950	660 628 644 980 1,080	268 252 239 227 216	87 83 80 78 78	67 63 60 60 57
11 12 13 14 15	62 62 62 62	57 57 58 62 62	42 48 57 56 57	55	52 52 51 54 47	57 57 59 60 60	61 60 83 131 153	860 860 980 1,140 1,200	830 728 666 628 616	204 193 185 182 179	78 78 75 72 70	56 54 54 53 54
16 17 18 19 20	62 62 60 60 60	62 64 62 60 62	57 56 57 56 53	57	54 52 52 52 49	61 57 60 52 61	136 122 124 122 124	1,240 1,340 1,410 1,600 1,300	688 728 616 655 1,200	169 164 156 151 143	69 67 64 63 63	52 52 51 49 54
21 22 23 24 25	60 58 57 60 63	58 57 46 46 49	57 57 57 58 57	51	51 56 54 53 53	52 61 59 57 56	143 136 134 122 138	1,270 1,380 1,380 1,270 1,410	1,010 830 710 616 560	136 129 126 120 124	61 59 59 59 57	60 60 60 59 57
26 27 28 29 30 31	60 58 54 57 60 64	44 39 40 39 40	56 56 53 42 51 50	48	54 53 54	57 60 57 56 61 60	188 242 227 207 196	1,340 1,300 1,300 1,170 950 830	510 473 446 414 394	124 113 109 102 100 98	57 56 56 56 56 56	57 56 56 56 56

Y	Second-	Meximum	w4 4		Per	Ru	n-off
Month	foot-days	reximum	Minimum	Mean	square mile	Inches	Acre-feet
October	1,893	64	54	61.1	0.287	0.33	3.750
November	1,621	68	38	54.0	.254	•28	3,220
December	1,613	58	40	52.0	.244	•28	3,200
Calendar year 1936	116,718	3,110	38	319	1.50	20.36	231,500
January	1,547	-	_	49.9	.234	.27	3.070
February	1,445	56	47	51.6	.242	.25	
March	1,771	61	52	57.1	.268	.31	3.510
April	3,445	242	54	115	.540		
May	32,142	1,600	242	1.037	4.87	5.62	63.750
June	21,370	1,200	394	712	5.34	3.73	42,390
July	5,792	362	98	187	.878	1.01	11.490
August	2,222	102	56	71.7	.337	.39	4.410
September	1,702	69	49	56.7	-266	-30	
Water year 1936-37	76,563	1,600	-	210	.986	13.37	151,900

Mud Creek near Tamarack, Idaho

Location.- Staff gage, lat. 45°00', long. 116°21', sec. 9, T. 19 N., R. 1 E., 0.5 mile above Little Mud Creek, 5 miles above confluence of Mud Creek with Little Salmon River and 32 miles northeast of Tamarack.

Drainage area .- 15.8 square miles.

Records available. - April to September 1937 (in April and during June to September, discharge measurements only).

Extremes. - Maximum discharge observed, 100 second-feet May 4 (gage height, 2.16 feet); minimum, probably less than half a second-foot, occurred during late summer.

Remarks. - Records good. Discharge for May 1 computed upon basis of records for stations in upper Weiser River Basin. No diversions or regulation. U. S. Bureau of Reclamation furnished results of 14 discharge measurements.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Nay	June	July	Aug.	Sept.
1 2 3 4 5								60 *75 ††88 *100 *92	*4.9			
6 7 9 10								††80 *68 ††65 ††61 ‡58				1 0.7
11 12 13 14 15								††56 ††53 **51 ††47 ††42	**5.8 **3.4			
16 17 18 19 20							*47	*38 ††34 †30 *26 ††22		† 1.0	† 0.5	
21 22 23 24 25				,			**42	*19 ††17 *15 ††14 *13	†4. 6			## . 5
26 27 28 29 30 31							†84	††12 ††10 *9 ††8.2 ††7.3 *6.5				

^{*}Measurement by Bureau of Reclamation engineer.
Heasurement by Geological Survey engineer.
Heasurement by Geological Survey and Bureau of Reclamation.
**Determined from staff-gage readings.

Grande Ronde River at La Grande, Oreg.

Location. - Water-stage recorder, lat. 45°21', long. 118°09', in sec. 35, T. 2 S., R. 37

E., 22 miles northwest of La Grande. Zero of gage is 2,831.25 feet above mean sea
level (general adjustment of 1929).

Taylor (general adjustment of 1929).

Drainage area. 678 square miles.

Records available. February 1918 to June 1923, October 1923 to September 1937.

November 1903 to September 1915, at Hilgard, 4 miles upstream; records equivalent.

Average discharge. 23 years (1905-9, 1910-11, 1912-15, 1918-20, 1921-22, 1925-37), 350

second-feet.

Second-feet.

Extremes.- Maximum discharge during year, 3,220 second-feet Apr. 15 (gage height, 5.75 feet); minimum, 5 second-feet Nov. 22 (gage height, 1.06 feet).

1903-15, 1918-23, 1925-37: Maximum discharge, 8,886 second-feet Mar. 18, 1932 (gage height, 8,90 feet); minimum, 4 second-feet Sept. 14, 16-20, 1922.

Remarks.- Records good except those for periods of ice effect, Nov. 23-25, Dec. 2 to Mar. 5, which were computed on basis of three discharge measurements, gage heights, weather records, and records for station near Starkey (unpublished) and station at Rondowa. Several small diversions for irrigation above station.

Rating tables, 1936-37 except for periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 5	Mar. 6 to Sept. 30
1.1 6	1.2 9 2.9 460
1.3 18	1.4 25 5.2 630
1.6 51	1.6 49 3.6 895
1.9 106	1.8 82 4.0 1,200
200	2.0 125 4.5 1,640
	2.3 210 5.0 2,200
	9 8 315 5 5 9 B60

_													
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug	.	Sept.
1 2 3 4 5	13 13 13 13 13	24 37 29 24 28	54			63 66 70 130 270	1,460 1,160 839 710 636	1,120 1,420 2,260 2,450 2,020	375 365 360 328 295	15 13 12 11 10	9 B 1	36 36 34 29 27	17 21 19 17 20
6 7 8 9 10	14 14 14 14 14	27 21 28 20 24	5e		31	385 320 283 307 324	594 532 594 895 1,160	1,740 1,200 1,120 1,160 1,240	268 244 231 234 338	9 9 8 8 7	2. 6	23 23 21 21 20	22 22 20 18 16
11 12 13 14 15	13 13 14 14 15	29 38 38 34 34				476 564 618 624 722	965 895 1,500 2,260 2,860	1,320 1,320 1,420 1,600 1,550	303 287 247 225 234	6 6 6 5	4 2 1	21 20 16 18 16	15 1 3 1 2 12 12
16 17 16 19 20	16 17 17 17 17	35 32 35 28 29	82		25	1,000 930 895 612 498	1,900 1,320 1,200 1,280 1,320	1,370 1,320 1,240 1,160 1,040	240 275 240 279 333	6 5 4 4	Б О В	16 16 14 13 12	11 11 11 11 12
21 22 23 24 25	17 17 17 18 20	21 26 20 22 28	45		35	395 405 333 370 450	1,460 1,240 965 818 867	930 888 632 769 769	365 324 346 299 264	4 3 3 3 4	9 6 6	12 12 12 12 12	12 15 15 15 15
26 27 28 29 30 31	20 20 20 19 21 24	56 41 47 50 53] _ =	576 684 811 684 722 874	1,120 1,500 1,280 1,080 965	703 654 624 559 476 405	234 216 195 171 160	4 4 5 4 3 3	8 6 6	12 13 12 11 12 15	15 15 15 15 15
	Month			cond- t-days	Maximum	Minimu	m Me	an sq	Per uare ile	Ru: nches	n-of Acı	f re-feet	

Wantas	Second-	Maximum	W44		Per	Ru	n-off
Month	foot-days	neximum	Minimum	Mean	square mile	Inches	Acre-feet
October	501 938	24 53	13 20	16.2 31.3			994 1.860
December	1,602	8 1	20	51.7			3,100
Calendar year 1936	118,898	3 ,520	8	325			235,900
January	465	•	-	15			922
February	962 15.461	1,000	63	34.4 499			1,910 30,670
March	35,375	2.860	532	1.180			70.170
May	36.679	2.450	405	1,180		į	72,750
June	8,283	375	168	276			16,430
July	2,080	150	35	67.1			4,130
August	570	36	11	18.4		1	1,130
September	459	22	11	15.3			910
Water year 1936-37	103,375	2,860	11	283			205,100

Grande Ronde River at Rondowa, Oreg.

Location. - Water-stage recorder, lat. 45°44', long. 117°47', in NW1 sec. 23, T. 3 N., R. 40 E., 500 feet below mouth of Wallowa River, at Rondowa. Zero of gage is about 2,281 feet above mean sea level by railroad company profile and Geological Survey river profile.

Drainage area. - 2,555 square miles.

Records available .- October 1926 to September 1937.

Average discharge .- 11 years, 1,844 second-feet.

Extremes.- Maximum discharge during year, 6,260 second-feet May 27 (gage height, 5.05 feet); minimum daily discharge, 230 second-feet Jan. 8.
1926-37: Maximum discharge, 22,400 second-feet Mar. 18, 1932 (gage height, 9.30 feet) from rating curve extended above 7,500 second-feet; minimum, 225 second-feet Dec. 19, 1935; minimum daily discharge, that of Jan. 8, 1937.

Remarks. - Records good except those for periods of ice effect, Nov. 27, 28, Jan. 3 to Mar. 5, and of missing gage heights, Mar. 31 to Apr. 4, which were computed on basis of weather records and records for stations at La Grande and for Immaha River at Immaha and are fair. Many irrigation diversions above station. Flow regulated by storage in Wallowa and Minam Lakes.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

	045				- 0
0.7	247	1.9	1,080	3.5	3,230
.9	316	2.2	1,390	4.0	4,110
1.1	422	2.6	1.870	4.5	5.060
1.3	560	3.0	2,430	5.0	6,140
1.6	805		•		-

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3	305 308 312	364 350 321	293 393 410	326 278 270	*340 370 360	720 850 1,000	1,650 1,600 1,800	3,660	4,020	2,140 1,940 1,740	393 376 359	345 345 335
4 5	321 330	364 376	410 393	280 310	380 380	1,170 1,500	2,360	5,160	4.200	1,560 1,470	350 345	330 393
6 7 8 9	330 326 326 326 321	370 359 330 326 340	416 468 462 448 405	290 260 230 260 290	360 340 340 320 320	1,620 1,620 1,620 1,680 1,620	2,360 2,140 2,000 2,260 2,660	4,760 4,480 4,670	3,230 3,060 2,900	1,310 1,180 1,050 967 877	326 321 316 316 316	393 376 354 340 330
11 12 13 14 15	321 326 345 345 354	359 359 354 354 370	370 364 364 376 370	305 320 320 330 330	360 380 380 360 340	1,800 1,940 1,940 1,940 2,210	2,820 2,660 3,110 4,200 5,160	4,670 5,060 5,690	2,980 2,740 2,660	832 796 771 737 688	312 312 316 316 316	330 316 312 308 305
16 17 18 19 20	364 364 354 354 354	364 381 376 359 359	359 364 370 370 364	310 300 290 270 250	340 345 355 365 385	2,660 2,660 2,740 2,280 1,940	4,860 4,380 4,110 3,750 3,570	5,690 5,800 5,580	3,750 3,320 3,750	648 616 560 538 495	316 321 321 308 305	297 286 286 27e 289
21 22 25 24 25	354 354 354 359 359	354 354 340 316 308	370 381 405 448 410	240 260 300 320 330	410 430 455 480 490	1,620 1,480 1,390 1,320 1,370	3,750 3,750 3,570 3,140 2,900	5,360 5,160 5,060	4,760 4,200 3,660	455 442 422 405 387	312 297 293 297 301	293 293 301 305 301
26 27 28 29 30 31	359 359 359 359 364 359	305 308 280 285 289	381 376 370 359 321 308	340 340 330 330 320 300	500 550 620 -	1,500 1,620 1,740 1,800 1,800 1,750	2,980 3,570 3,480 3,320 3,060	5,800 5,580 4,860	2,820 2,580 2,430 2,430	376 376 381 370 359 359	301 293 297 305 312 330	301 301 301 301 301
\vdash	W					Second	- -		<u> </u>		Ru	n-off in

Month	foot-days	Maximum	Minimum	Mean	acre-feet
October	10,625 10,274 11,898	364 381 468	305 280 293	343 342 384	21,070 20,380 23,600
Calendar year 1936	681,504	12,000	256	1,862	1,352,000
January. February Barch. April May Log Log Log Log Log Log Log Log Log Log	52,900 94,390 154,990 103,750 25,247	340 620 2,740 5,160 5,910 5,060 2,140 393 393	230 320 720 1,600 3,140 2,430 359 293 278	298 395 1,706 3,146 5,000 3,458 814 319 318	18,310 21,930 104,900 187,200 307,400 205,800 50,080 19,630 18,930
Water year 1936-37	503,803	5,910	230	1,380	999,200

Catherine Creek near Union, Oreg.

Location. - Staff gage, lat. 45°09', long. 117°47', in SW2 sec. 2, T. 5 S., R. 40 E., 6 miles southwest of Union.

Drainage area .- 105 square miles.

Records available.- May 1906 to May 1907 (gage heights only), August 1911 to December 1912, March to September 1915, February 1918 to August 1919, October 1925 to September 1937.

Average discharge -- 14 years (1911-12, 1918-19, 1925-37), 115 second-feet.

Extremes. - Maximum discharge observed during year, 520 second-feet May 14 (gage height, 2.39 feet); minimum daily discharge 14 second-feet Nov. 25, 26. 1906-7, 1911-12, 1915, 1918-19, 1925-37: Maximum discharge observed, 1,240 second-feet May 21, 1912 and June 3 or 4, 1933; minimum, 4 second-feet Nov. 26, 27, 1930.

Remarks. - Records good except those for periods of ice effect, Nov. 2, 3, 5-8, 22-29, Dec. 2-9, 12-20, Dec. 30 to Feb. 26, which were computed on basis of two discharge measurements, gage heights, and weather records and are fair. A few small diversions for irrigation above station; beginning in 1937 some water diverted into Big Creek in Powder River Basin.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. I to May 12				May 13 to Sept. 30						
0.4	11	1.6	240	0.4	15	1.6	226			
.7	35	2.0	387	.7	3 e	2.0	350			
1.0	81	2.4	571	1.0	81	2.4	520			
7 7	167			1 7	3 4 17					

Day	Get.	Now.	Dea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 5 4 5	16 17 16 19	19 20 20 20 19	27 25 25 26 28	21 22 22 21 18	21 23 26 28 27	29 29 30 33 38	107 102 98 87 65	256 308 408 475 408	270 317 285 285 255	93 81 87 76 76	36 35 34 34 32	25 24 22 22 22
6 7 8 9	1e 17 17 17 17	19 20 20 19 20	30 32 32 29 28	16 15 16 17 18	25 22 20 19 20	38 40 43 45	89 85 87 138 133	366 366 327 308 308	226 198 198 198 226	72 67 64 61 58	31 30 28 28	25 24 24 24 22
11 12 13 14 15	16 16 16 16 23	21 22 22 20 20	32 30 27 24 22	20 22 24 26 27	21 22 23 22 22	60 63 70 72 77	123 114 173 209 176	346 387 470 520 427	172 167 164 167 160	57 57 55 54 53	28 28 29 27	22 22 21 21 21
16 17 18 19 20	21 19 17 17 16	19 23 22 19 17	21 20 20 19 19	26 25 23 20 16	24 23 20 18 17	76 81 79 72 62	148 146 141 151 159	427 427 427 427 427	285 226 240 226 226	46 45 43 43	26 25 25 24 25	20 20 20 20 20
21 22 25 24 25	17 17 17 19 19	17 16 16 15 14	19 20 22 24 26	15 16 17 19 20	18 19 20 22 24	56 56 54 52 52	151 168 143 100 123	448 406 386 406 427	19e 185 167 157 150	40 38 39 38 38	24 24 24 24 24	22 22 22 22 22
26 27 28 29 50 31	18 18 18 18 18	14 17 21 27 33	31 19 17 19 19 20	22 23 23 22 20 19	26 29 28 -	56 70 7 <u>4</u> 79 8 9 96	146 224 179 171 176	386 386 350 301 270 285	133 125 116 114 97	37 50 37 37 36 37	24 23 22 23 23 25	21 21 20 20 21

Month	Second- foot-days	Maximum	Minimum	Me an	Run-off in acre-feet
October	546 591 752	23 33 32	16 14 17	17.6 19.7 24.3	1,080 1,170 1,490
Calendar year 1936	35,580	785	14	97.2	70,570
January. February March. April. May June June July August September.	631 629 1,828 4,132 11,866 5,933 1,659 840 656	27 29 96 224 520 317 93 36 25	15 17 29 85 256 97 36 22 20	20.4 22.5 59.0 138 383 198 53.5 27.1 21.9	1,250 1,250 3,630 8,200 23,540 11,770 3,290 1,670 1,300
Water year 1936-37	30,063	520	14	62.4	59,640

East Fork of Wallowa River near Joseph, Oreg.

Location. - Staff gage, lat. 45°16', long. 117°13', in SW1 sec. 29, T. 3 S., R. 45 E., a quarter of a mile above mouth, 1 mile above Wallowa Lake, and 6 miles south of Joseph.

Drainage area. - 9.6 square miles.

Records available .- July 1924 to September 1937.

Average discharge. - 13 years (1924-37), 11.2 second-feet.

Extremes. Maximum discharge during year, 300 second-feet (estimated) July 25 (gage height, 3.63 feet, from floodmark); minimum observed, 0.5 second-foot Oct. 28, Feb. 22, 23, 25, 26 (probably less at times during periods of ice effect). 1924-37: Maximum discharge, that of July 25, 1937; minimum, 0.1 second-foot Dec. 7, 1929, Nov. 1, 6, 1935.

Remarks.- Records good except those below 2 second-feet, which are fair, and those for periods of ice effect, Nov. 2, 3, 8, 9, Nov. 28 to Dec. 5, Dec. 10-13, Dec. 28 to Feb. 10, Feb. 16, and of missing gage-heights, Feb. 12-15, 17-20, July 25-28 (computed on basis of power-plant and weather records), which are poor. Practically entire low-water flow diverted 1 mile upstream for power use. Gage readings furnished by Inland Power & Light Co.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.1 0.9 .9 1.1 2.6 1.3 5.3 1.5 8.6 17 31 49 0.5

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	3.3 3.1 1.0 2.6 2.2	0.9 1.0 1.0 1.5 2.2	2.0 1.5 1.5 1.5 1.5		0.7 .8 .8 .8	0.7 .7 .8 .7	0.9 .9 .9 .9	2.4 6.6 8.2 9.0 7.2	24 27 28 33 33	34 33 31 31 28	8.2 7.9 5.3 4.7 5.1	1.8 1.6 1.5 1.5
6 7 8 9	1.8 1.8 1.8 1.5	1.8 1.5 1.0 1.0	1.5 1.3 1.5 1.5		.6 .6 .6	.7 .8 .7 .8	.9 1.0 .9	7.2 7.2 7.2 9.6 8.2	31 31 31 31 29	24 22 22 17 16	4.7 4.1 9.2 4.4 3.8	2.2 1.6 1.5 1.6 1.6
11 12 15 14 16	2.6 1.8 1.6 1.8 1.8	1.6 1.5 1.6 1.6	1.0 1.0 1.0 .9 1.5		.8 .8 .7 .6	.9 1.2 2.6 4.3 1.8	.9 5.0 6.6 5.0	7.6 9.0 13 14 14	22 23 23 21 21	17 16 14 13 13	4.1 4.1 3.8 3.8 5.0	1.5 .8 1.5 1.5 1.5
16 17 18 19 20	1.8 2.0 3.3 1.8 1.8	1.6 1.5 1.6 .9 1.6	.7 1.2 1.5 1.5		.8 .7 .7 .7	1.6 1.3 1.2 1.2 1.2	3.8 3.1 2.2 2.0 1.8	16 15 14 15 16	22 23 24 25 33	15 13 13 12 9.3	2.8 2.8 3.3 3.1 3.8	1.5 1.5 1.5 2.0 1.5
21 22 23 24 25	1.8 1.5 2.4 2.6 2.8	1.5 1.3 .9 1.2 1.2	.7 1.6 1.2 1.3 2.2		.7 .6 .6 .7	1.3 .9 1.8 1.8	2.4 1.8 1.8 1.5 2.4	15 16 18 18 31	37 44 39 38 33	9.3 8.6 9.3 10 30	3.9 4.1 3.6 2.4 2.2	1.5 1.5 1.5 2.4
26 27 28 29 30 31	1.8 1.5 .7 1.6 2.6 2.6	1.6 .8 1.5 2.5 1.5	1.5 1.5 1.0 .6 1.0		.6 .7 .7 - -	1.6 .9 .8 .9	2.2 2.6 2.2 2.0 2.2	31 33 27 24 24 21	51 35 32 33 34 -	25 20 18 7.4 6.9 8.6	2.2 2.8 2.8 4.1 3.1 2.2	2.0 1.3 1.5 1.3 1.5

Month	Second- foot-days	Maximum	Kinimum	Mean	Run-off in
October	63.9 41.9 40.0	3.3 2.5 2.2	0.7 .8 .6	2.06 1.40 1.29	127 83 79
Calendar year 1936	2,674.0	71	.2	7.31	5,310
January. February March April May June June July August August August August August August August	19.3 37.5 61.9 464.4 891 546.4	- 8 4.3 6.6 33 44 34 9.2 4.4	- .6 .7 .9 2.4 21 6.9 2.2	1.0 .69 1.21 2.06 15.0 29.7 17.6 4.11 1.67	61 38 74 123 921 1,770 1,080 253 99
Water year 1936-37	2,374.8	44	-	6.51	4,710

Wallowa Falls power plant tailrace near Joseph. Oreg.

Location. Staff gage, lat. 45°16', long. 117°13', in SE; sec. 29, T. 3 S., R. 45 E., a quarter of a mile above point where channel discharges into West Fork of Wallowa River and 6 miles south of Joseph. Zero of gage is 4,624.79 feet above mean sea level (general adjustment of 1929).

Records available .- August 1924 to September 1937.

Average discharge .- 13 years, 7.33 second-feet.

Extremes. - Maximum discharge during year, 14 second-feet Oct. 19, 20, Nov. 5 (gage height, 0.91 foot); no flow at times. 1924-37: Maximum discharge, 17 second-feet Dec. 1, 8, 1930, Jan. 9, 10, 1931; no flow at times.

Remarks. - Records good. Flow regulated by discharge through nozzle for impulse wheel in power house. Water diverted at dam on East Fork of Wallowa River into conduit 1 mile above power house and discharged into West Fork a quarter of a mile downstream. Gage readings furnished by Inland Power and Light Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	8.1 7.7 7.9 7.2 8.1	7.4 7.7 7.7 8.3 8.3	7.2 7.6 7.9 7.6 7.7	7.7 7.6 7.9 7.6 7.6	7.4 7.6 7.7 7.7 7.6	6.5 6.8 6.6 6.6 7.0	6.5 6.8 6.5 6.6	7.9 7.0 7.9 8.3 7.9	8.3 8.3 5.1 7.4 1.9	8.5 8.1 8.9 7.7 8.1	7.4 8.5 8.7 9.1 8.7	9.3 9.3 9.1 9.7 7.6
6 7 8 9 10	8.3 8.1 8.1 7.9 7.9	8.3 7.6 7.6 8.3 8.1	7.7 8.1 8.1 7.9 8.1	7.6 7.4 7.2 7.4 7.6	7.9 7.9 8.1 7.7 7.6	7.0 7.2 6.6 6.6 6.8	7.0 6.8 6.8 7.0	7.9 7.9 7.9 6.9 8.3	0 0 0 0 6.4	8.5 8.3 8.3 8.1 8.3	9.1 9.3 4.6 9.7 9.5	8.7 9.3 9.1 8.9 8.7
11 12 13 14 15	7.2 8.1 8.7 8.3 8.1	8.3 7.9 7.9 8.3 7.6	8.1 7.7 7.7 7.7 7.6	7.2 7.0 7.2 7.6 7.6	7.4 7.6 7.6 7.6 7.6	6.6 7.7 8.1 6.1 8.1	7.2 6.6 8.3 8.3 8.3	8.1 7.9 7.9 7.9 8.1	8.] 7.9 7.4 7.9 8.5	7.4 8.3 8.5 8.3 6.8	8.9 9.1 8.7 9.1 7.7	9.5 7.7 8.9 8.7 8.5
16 17 18 19 20	7.9 8.1 7.2 8.3 8.5	8.1 8.3 8.1 7.9	7.7 7.7 7.9 7.7 7.7	8.1 7.6 7.7 7.7 7.9	7.4 7.6 7.6 7.6 7.4	7.9 7.6 7.6 7.4 7.6	8.5 7.9 7.2 7.9 7.9	7.2 8.3 6.3 8.1 7.2	8.1 7.1 8.3 8.1 7.6	7.9 8.3 6.5 8.3 8.7	8.9 9.3 9.1 8.7 8.7	e.5 8.1 8.3 7.7 9.1
21 22 23 24 25	8.3 8.1 7.9 8.1 7.4	8.3 7.6 8.1 7.7 7.7	7.9 7.7 7.7 8.3 7.7	7.2 7.6 7.6 7.6 7.2	7.6 7.4 7.0 7.2 7.2	7.2 7.2 6.8 6.5 6.3	7.9 7.7 7.7 7.6 7.2	7.6 7.9 7.4 7.9 8.3	8.1 8.7 8.1 7.9 7.9	8.1 8.3 8.5 8.7 5.7	8.5 7.9 9.1 8.1 9.1	8.1 8.3 8.5 8.5
26 27 28 29 30 31	8.3 8.1 8.1 7.9 7.9 8.3	7.6 7.9 7.6 6.6 7.7	7.9 7.6 7.6 7.7 7.9 7.6	7.2 7.4 7.9 7.6 7.7 7.4	7.0 7.2 7.0 - -	6.1 6.5 6.3 5.9 6.5 6.5	7.9 8.3 7.9 7.7 7.6	7.9 7.9 8.1 8.1 7.2 7.7	8.1 7.4 8.3 8.5 8.7	0 0 7.0 8.3 8.9	8.9 8.7 9.1 7.7 8.7 9.1	7.6 8.3 8.3 8.3 8.1

Month	Second- foot-days	Maximum	Kinimm	Mean	Run-off in acre-feet
October November December	248.1 236.6 241.0	8.7 8.3 8.3	7.2 6.6 7.2	8.00 7.89 7.77	492 469 478
Calendar year 1936	2,934.8	9.7	6.4	8.02	5,820
January February Barch April Bay Jun Jun Jun Jun Jun August August September	210.2 214.4 223.4 242.9 201.1 225.6	8.1 8.1 8.5 8.7 8.9 9.7 9.7	7.0 7.0 5.9 6.5 6.9 0 4.6 7.6	7.54 7.51 6.92 7.45 7.84 6.70 7.28 8.64 8.57	463 417 425 443 482 399 447 531 510
Water year 1936-37	2,801.8	9.7	0	7.68	5,560

Hurricane Creek near Joseph. Oreg.

Location. - Water-stage recorder, lat. 45°20', long. 117°18', in NE2 sec. 3, T. 3 S., R. 44 E., above intake of Moonshine ditch and 32 miles southwest of Joseph.

Drainage area .- 31 square miles.

Records available .- April to September 1915, April 1924 to September 1937.

Average discharge. - 10 years (1927-37), 61.9 second-feet.

Extremes. - Maximum discharge during year, 396 second-feet June 20 (gage height, 2.74 feet); minimum, 5.8 second-feet Jan. 7 (gage height, 0.98 foot).
1915, 1924-37: Maximum discharge, 716 second-feet May 26, 1928 (gage height, 2.65 feet, former site and datum); minimum, that of Jan. 7, 1937.

Remarks.- Records good. Discharge for period of missing gage heights, Apr. 27 to May 2, computed on basis of range of stage and records for Lostine River near Lostine and Bear Creek near Wallowa. No diversions above station.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.6 0 .9 3.0 1.2 17.3 1.5 35 1.8 78 2.1 153 2.4 252 2.7 377

Discharge, in second-feet, water year October 1936 to September 1937

Day	Qot.	Now.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	17 17 17 17 17	14 13 13 13 13	10 10 10 11 11	10 9.0 9.5 10	9.0 12 12 12 12	8.5 8.5 9.0 9.0	13 13 13 13 13	40 65 98 96 98	165 214 234 204 191	184 178 162 165 153	50 46 45 43 45	26 26 25 25 26
6 7 8 9	17 17 16 16 17	14 13 13 14 14	12 12 12 11 11	8.0 7.0 9.0 10	12 12 12 10 10	9.5 9.0 9.5 10	13 13 13 13	96 96 100 110 105	194 200 191 181 187	139 125 115 108 105	44 43 42 42 40	26 25 25 24 24
11 12 13 14 15	17 17 16 16 16	14 13 13 13 13	11 11 11 11 10	10 12 12 12 12	10 10 11 1 0 1 0	11 11 12 12 12	14 14 19 24 29	93 91 122 136 131	178 145 136 150 175	102 100 93 89 87	39 39 39 38 36	24 24 24 23 23
16 17 18 19 20	16 16 16 16 16	13 13 13 13 13	11 11 12 12 12	12 12 13 13	10 10 10 9.5 9.0	13 12 12 13 13	22 20 20 20 20	136 147 145 150 150	228 172 159 194 303	80 78 76 74 71	35 34 33 33 32	23 23 23 23 22
21 22 23 24 25	15 14 14 14 14	13 13 12 12 12	11 11 11 11 11	13 14 15 15 15	9.0 9.0 8.5 8.5	12 12 12 12 12	21 21 21 21 22	165 184 178 194 256	282 256 210 181 178	71 67 64 64 64	32 31 31 30 29	22 22 22 22 21
26 27 28 29 30 31	14 14 14 14 14 14	12 11 10 10 10	10 10 10 10 10	15 14 14 13 13	8.5 8.5 8.5 -	12 12 12 12 12 12	24 66 50 40 35	263 245 220 178 139 131	178 184 197 197 197	64 60 59 53 52 53	29 28 28 27 26 26	21 21 21 28 33

	Second-		W44		Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October	485 380 337	17 14 12	14 10 10	15.6 12.7 10.9	0.503 .410 .352	0.58 .46 .41	962 754 668
Calendar year 1936	20,814	394	9	56.9	1.84	24.97	41,290
January February Harch April Hay June June July August September	367.5 281.5 345.5 654 4,358 5,861 2,955 1,115	15 12 13 66 263 303 184 50 33	7.0 8.5 8.5 13 40 136 52 26 21	11.9 10.1 11.1 21.8 141 195 95.3 36.0 23.9	.384 .326 .358 .703 4.55 6.29 3.07 1.16 .771	.44 .34 .41 .78 5.25 7.02 3.54 1.34	729 558 685 1,300 8,640 11,630 5,860 2,210 1,420
Water year 1936-37	17,856.5	303	7.0	48.9	1.58	21.43	35,420

Lostine River near Lostine, Oreg.

Location. - Water-stage recorder, lat. 45°26', long. 117°26', in NW1 sec. 34, T. 1 S., R. 43 E., 32 miles south of Lostine and 10 miles above mouth.

Records available.- August 1912 to March 1914, April to September 1915, July 1925 to September 1937.

Average discharge. - 10 years (1912-13, 1928-37), 171 second-feet.

Extremes.- Maximum discharge during year, 1,290 second-feet June 20 (gage height, 5.46 feet); minimum, 10 second-feet Nov. 28-30. 1912-14, 1915, 1925-37: Maximum discharge, 2,540 second-feet May 27, 1913; minimum, that of Nov. 28-30, 1938.

Remarks. - Records good except those for period of ice effect, Jan. 6 to Mar. 7, which Were computed on basis of two discharge measurements, weather records, and records for Bear Creek near Wallowa and Hurricane Creek near Joseph and are fair. No large diversions above station. Flow slightly regulated by storage in Minam Lake Reservoir.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet) (Shiftling-control method used Oct. 1 to Jan. 5)

0.4	12	2.5	282
.6	22	3.0	410
.9	43	3.5	5 60
1.2	70	4.0	720
1.5	103	4.5	89 5
2.0	186	5.0	1,080

_												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	18 18 18 19 20	17 14 14 18 18	11 11 13 13 13	13 13 13 14 15	14 14 14 15	14 14 14 14 15	25 25 23 23 23	103 166 255 328 328	575 772 895 808 702	530 485 410 396 368	70 64 58 56 52	52 45 40 34 35
6 7 8 9 10	20 19 18 1e 18	17 16 14 15	15 17 16 16 14	14 13 13 14 15	16 16 16 16	15 17 20 21 22	22 22 22 22 24	316 328 328 354 354	668 665 650 590 668	304 259 237 217 208	50 48 47 46 46	34 31 29 26 25
11 12 15 14 15	17 17 17 17 19	16 15 15 15 16	15 16 17 17 17	15 16 16 16 16	16 15 15 14 14	22 22 23 23 23	24 23 41 65 95	316 304 396 500 500	500 470 425 470 575	197 186 177 159 145	45 42 42 41 41	24 23 22 22 21
16 17 10 19 20	20 19 18 18 18	16 16 16 16 16	16 16 16 16 16	16 16 16 15 15	15 15 15 15 15	26 23 23 20 21	79 64 58 58 61	530 575 590 605 605	755 620 545 605 1,120	130 122 114 107 102	40 37 36 34 34	20 20 20 20 21
21 22 25 24 25	18 18 17 17 18	16 16 14 13 14	16 17 18 18 17	15 16 16 16 16	15 14 14 14 14	20 20 20 20 20	76 73 66 61 63	620 685 668 685 930	1,040 930 755 620 575	99 93 8e 88 88	32 32 32 32 52 57	22 21 21 21 21
26 27 28 29 30 31	18 18 18 17 17	12 11 10 10 10	15 16 14 15 14	16 16 16 16 15	14 14 14 - -	21 21 21 21 22 22	80 107 97 87 84 -	1,000 965 878 730 510 500	560 560 590 605 605	88 86 79 73 67 68	61 60 58 59 58 56	21 21 21 20 21

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	559 441 474	20 18 18	17 10 11	18.0 14.7 15.3	1,110 875 940
Calendar year 1936	61,319	1,570	10	168	121,600
January. February Karch. April. May. June July August Beptember.	414 620 1,593 15,952 19,938 5,770	16 16 26 107 1,000 1,120 530 70 52	13 14 14 22 103 425 67 32 20	15.0 14.8 20.0 53.1 515 665 186 47.3 25.8	924 821 1,230 3,160 31,640 39,550 11,440 2,910 1,540
Water year 1936-37	48,467	1,120	10	133	96,140

Bear Creek near Wallowa, Oreg.

Location.- Water-stage recorder, lat. $45^{\circ}32^{\circ}$, long. $117^{\circ}33^{\circ}$, in NE‡ sec. 34, T. 1 N., R. $42^{\circ}E$., at bridge $4\frac{1}{2}$ miles southwest of Wallowa.

Records available.- April to September 1915, November 1931 to September 1937. April 1924 to November 1931 at site 1 mile upstream and above intakes of two irrigation ditches with a combined capacity of about three second-feet.

Extremes. - Maximum discharge during year, 586 second-feet June 20 (gage height, 2.67 feet); minimum, 3 second-feet Jan. 20, Feb. 1.
1915, 1924-37: Maximum discharge, 1,620 second-feet Apr. 22, 1936 (gage height, 3.82 feet from floodmarks); minimum, that of Jan. 20, Feb. 1, 1937.

Remarks. - Records good except those for periods of missing gage heights or ice effect,

Oct. 27 to Nov. 17, Nov. 24 to Dec. 8 (computed on basis of weather records and records for Hurricane Creek near Joseph and Lostine River near Lostine), which are fair,
and thoss for periods of ice effect, Dec. 17, Dec. 31, Jan. 1, and Jan. 3 to Mar. 9
(computed on basis of three discharge measurements, weather records, and records for
above-named stations), which are poor. Small diversions for irrigation above station.

Rating tables, water year 1936-37 except for periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 18 to Dec. 30)

Oct. 1 to Mar. 1	.0 Ma:	r. 11 t	o Sept.	30
0.4 4	0.4	6	2.1	284
.6 8	.6	10	2.4	425
.9 27	.9	30	2.7	605
1.2 61	1.2	62		
1.5 109	1.5	109		
1 9 170	7 0	170		

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	6 6 6 6	7 6 6 7 8	4 4 5 5 5	6 6 6 6	3 4 4 4 5	4 4 4 4	30 28 28 28 28	147 228 318 379 336	318 410 447 394 332	147 131 113 98 89	17 16 15 14 14	99999
6 7 8 9 10	6 6 6 6	8 7 6 6 7	6 8 7 7	5 4 5 5 6	5 6 6 6	4 4 4 5 8	28 28 29 34 37	301 293 284 301 280	306 293 280 276 318	78 67 61 57 50	13 13 12 12 12	99888
11 12 13 14 15	6 6 7 7 6	7 6 6 7	8 7 7 7 8	6 7 7 7	5 5 5 4	16 18 19 21 24	37 41 68 143 191	253 249 327 405 389	253 238 224 224 238	47 43 42 39 36	12 12 12 12 12	8888
16 17 18 19 20	6 6 6	7 7 7 7	8 8 9 8 7	7 6 5 4 3	4 4 4 4	28 27 28 25 25	152 125 113 104 111	379 394 400 379 360	346 297 276 301 498	34 31 28 28 25	10 10 10 10	7 7 7 7 8
21 22 23 24 25	7 7 7 9 8	7 8 6 5 6	7 8 10 10 8	4 4 4 4	4 4 4 4	24 23 22 21 20	131 123 111 100 100	365 394 379 394 474	430 384 306 257 231	24 24 21 23 24	9999	8888
26 27 28 29 30 31	888888	6 5 4 4 -	10 10 9 7 6 6	5 4 4 4 4	4 4 - -	21 21 22 24 26 27	125 163 145 123 117	474 469 430 350 272 264	210 191 185 176 176	22 23 21 19 18 17	99999	88881

Month	Second- foot-days	Maximum	Minimus	Mean	Run-off in acre-feet
October. November. December.	208 190 226	9 8 10	6 4 4	6.7 6.3 7.3	413 377 448
Calendar year 1936	39,697	-	4	108	78,740
January. February March. April May June July August September.	527 2,621 10,667 8.815	7 6 28 191 474 496 147 17	3 4 28 147 176 17 9	5.2 4.5 17.0 67.4 344 294 47.7 11.1 8.1	317 248 1,050 5,200 21,160 17,480 2,940 684 480
Water year 1936-57	25,606	498	3	70.2	50,800

ASOTIN CREEK BASIN

Asotin Creek near Asotin, Wash.

Location.- Staff gage, lat. 46°20', long. 117°12', in sec. 20, T. 10 N., R. 45 E., half a mile above Washington Water Power Co.'s diversion for water supply and irrigation and 8 miles west of Asotin.

Drainage area .- 171 square miles.

Records available.- August 1928 to September 1937. March 1904 to November 1906, August 1910 to Uctober 1911, at practically same site.

Extremes.— Maximum discharge observed during year, 220 second-feet Apr. 15 (gage height, 1.75 feet); minimum, 16 second-feet Jan. 5; discharge may have been lower sometime during Jan. 1-26, while stage-discharge relation was affected by ice. 1904-6, 1910-11, 1928-37: Maximum discharge observed, 1,180 second-feet Apr. 15, 1904 (gage height, 4.3 feet, former datum); minimum, that of Jan. 5, 1937.

Remarks. - Records good except those for periods of ice effect, Jan. 1-26, 31, Feb. 1, which were computed on basis of one discharge measurement, gage heights, and weather records, and are poor. Gage read to hundredths twice daily. No important diversions or regulation. Gage readings and results of several discharge measurements furnished by Washington Water Power Co.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.4 16 .7 34 1.0 67 1.5 160

Day	Got.	Nov.	Dec.	Jan.	Feb.	Mar.	Ap:	r.	Yay	June	July	Aug.	Sept.
1	26	30	28	28	31	31		49	75	81	57	3	1 30
2 3	27	29	30 30	27	31	33		46	95	. 81	52	3	
21	26 28	30 30	30	28 30	29 30	33 33		48 46	117 140	S1 78	49 47	31	27
5	27	30	30	16	30	33		4e	130	73	46	2	34
6 7	27	30	31	17	30	36		46	117	6 8	44	2	3 31
8	26	29	31	19	30	37		45	103	64	42	2	30
9	26 26	30 29	31 31	20 22	30 30	38 39		44 47	100 102	67 67	42 40	30	30 29
10	26	30	30	24	29	44		51	109	86	38	3	že
11	27	30	30	24	31	48		52	102	75	36	3	2e
12	27 27	30 30	31 30	26 28	33 30	51 52		50 7e	100 105	67 62	35 37	30	27
13	28	30	30	30	30	51		28	136	60	38	2	2 28
15	28	30	30	31	30	48		10	145	67	37	2	2e 27 25 3 28 9 2e
16	2e	30	30	30	30	54	1	183	134	71	36	2	8 27
17	2e 28	30	30 30	30 29	30 30	53	1	36	125	68	35	2	5 27
19	28	30 30	30 30	29	30	55 52	1	111	125 128	68 75	34 34	2	5 27
20	28	30	30	27	30	50	ī	02	123	105	33	2	
21 22	28	31	30	28	30	48		11	117	98	33	2	5 28 7 26 8 28 0 28
22 23	29 29	30	31 31	28 29	34	45	1	.02	113	95	33	2	7 20
24	30	30 30	34	29	33 30	42 41		91 81	117	93	33	2	8 28
25	30	30	31	30	30	40		78	113 117	86 78	31 31	30 21	28
26	30	28	31	30	30	40		88	119	73	30	2	3 28
27 28	29	28	31	31	31	40		.09	117	66	30	21	7 I 28
58	29 29	28 28	31 31	30 30	30	40 40		98 84	115	62 60	31 30	21	28 27
30	29	28	30	28	_	42		75	105 95	57	30	2	7 27
31	30	-	30	28		44		-	84	- 37	30	2	
	Month				Second foot-da	i- iya	Ma:	cimum	Minimum	Mea	n [Run-off in	
October					364 389		30 31	26 28	27. 29.		1,710 1,760		

Month	Second- foot-days	Maximum	Minimum	Mean	Run-off in aere-feet
October. November. December.	864 889 944	30 31 34	26 28 28	27.9 29.6 30.5	1,710 1,760 1,870
Calendar year 1936	23,361	372	24	63.8	46,330
January. February Karch. April Kay June July June July August Beptember	852 1,333 2,541 3,523 2,232 1,154	31 34 55 210 145 105 57 31	16 29 31 44 75 57 30 26 27	26.9 30.4 43.0 84.7 114 74.4 37.2 20.4 28.2	1,660 1,690 2,640 5,040 6,990 4,430 2,290 1,740 1,680
Water year 1936-37	16,893	210	16	46.3	33,500

Selway River near Lowell, Idaho

Location. - Water-stage recorder, lat. 46°05', long. 115°31', in sec. 25, T. 32 N., R. 7

E., at O'Hara ranger station, a quarter of a mile above O'Hara Creek and 7 miles above Lowell post office.

Drainage area. - 1,510 square miles.

Records available .- April 1911 to September 1912, October 1929 to September 1937.

Extremes.- Maximum discharge during year, 17,400 second-feet May 19 (gage height, 9.46 feet); minimum, probably less than 100 second-feet Jan. 8, during period of ice effect. 1930-37: Maximum discharge, 33,800 second-feet June 14, 1933 (gage height, 13.17 feet); minimum, that of Jan. 8, 1937.

Remarks. - Records good except those for periods of missing gage-heights or ice effect, Oct. 1, 2, 5-10, Nov. 25 to Dec. 11, Jan. 1 to Mar. 13, which were computed on basis of one discharge measurement, weather records, and records for other stations in Clearwater River Basin and are fair. No diversions.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.1	210	4.1	1,940	6.1	5,680	8.1	11,750
2.5	389	4.5	2,520	6.5	6,680	8.5	13,270
2.9	666	4.9	3.180	6.9	7,790	8.9	14.860
3.3 3.7	1,020	5.3 5.7	3,920 4,760	7.3 7.7	9,000 10,320	9.3	16,510 17,350

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul y	Aug.	Sept.
1 2 3	440 430 426 426	450 426 367 384	300 380 500 500).		530 580 670 700	1,210 1,330 1,240 1.150	3,270 4,650 7,220 9,980	10,300 11,000 12,500 11,400	3,180 2,920 2,760 2,520	880 954 880 808	426 420 407 420
5	460	504 504	500	210		770	1,130	12,100	9,650	2,370	765	517
6 7 8 9 10	520 480 460 440 430	510 484 420 356 329	500 550 650 600 500			800 870 800 770 800	1,120 1,080 1,080 1,220 1,370	10,700 9,980 10,300 11,000 11,800	9,000 8,690 8,690 9,320 9,650	2,220 2,080 1,940 1,810 1,710	723 691 674 666 674	504 477 444 426 413
11 12 13 14 15	426 426 426 432 517	389 444 463 470 484	450 430 430 440 440			1,050 1,200 1,300 1,280 1,070	1,430 1,370 1,690 2,760 3,360	11,000 10,300 11,000 12,100 13,700	8,690 8,380 7,940 8,080 8,080	1,620 1,550 1,490 1,450 1,490	682 658 628 604 582	401 389 378 378 372
16 17 18 19 20	510 477 457 444 438	497 524 560 504 457	440 450 500 520 500	380		1,070 1,080 1,050 944 843	3,180 2,680 2,440 2,520 2,760	13,300 14,100 14,900 16,100 14,500	7,790 8,080 6,680 6,680 9,000	1,410 1,320 1,240 1,220 1,150	567 553 531 510 497	372 362 356 350 350
21 22 23 24 25	426 426 432 438 444	450 426 384 329 270	480 520 580 612 560			782 765 861 817 825	3,640 3,270 2,920 2,600 2,600	12,100 12,900 14,100 14,100 14,900	8,380 7,640 6,820 5,680 4,870	1,090 1,040 1,000 954 925	490 477 470 470 470	372 401 407 401 389
26 27 28 29 30	438 438 432 426 420	250 230 210 200 210	504 463 450 450 356			861 916 944 934 1,010	3,010 4,220 4,220 3,540	15,700 15,300 15,700 13,300	4,440 4,120 3,820 3,540	963 992 944 963 870	457 444 444 444 438	395 401 389 389 401
31	432	- 210	356 320	J		1,120	3,010	11,000 9,900	3,450	870 825	438 438	401

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	13,817 11,981 14,875	520 560 650	420 200 300	446 399 480	0.295 .264 .318	0.34 .29 .37	27,410 23,760 29,500
Calendar year 1936	1,315,052	31,10	200	3,593	2.38	32.38	2,609,000
January February Harch April Hay June July August September	10,080 11,760 28,012 69,150 371,080 232,360 48,016 18,569 12,107	1,300 4,220 16,100 12,500 3,180 954 517	530 1,080 3,270 3,450 450 438 350	325 420 904 2,305 11,970 7,745 1,549 599 404	.215 .278 .599 1.53 7.93 5.13 1.03 .397 .268	.25 .29 .69 1.71 9.14 5.72 1.19 .46	19,990 23,330 55,560 137,200 736,000 460,900 95,240 36,830 24,010
Water year 1936-37	841,807	16,100	-	2,306	1.53	20.75	1,670,000

Clearwater River at Kamiah, Idaho

Location. - Water-stage recorder, lat. 46°14', long. 116°01', in sec. 1, T. 33 N., R. 3 E., 300 feet upstream from highway bridge at Kamiah and 6 miles below mouth of South Fork of Clearwater River.

Drainage area. - 4,850 square miles.

Records available .- August 1910 to September 1937.

Average discharge. - 27 years 6,180 second-feet.

Extremes. Maximum discharge during year, 34,300 second-feet May 19 (gage height, 11.61 feet); minimum discharge, probably less than 200 second-feet, Jan. 8, during period of ice effect.
1910-37: Maximum discharge observed, 81,400 second-feet June 10, 1933 (gage height, 16.53 feet); minimum, that of Jan. 8, 1937.

Remarks. - Records good except those for periods of ice effect, Dec. 1, Jan. 4, 5, Jan. 8

to Feb. 28, which were computed on basis of one discharge measurement, gage heights, and
weather records, records for station at Spalding and are fair. Practically no diversion or regulation above station. Gage-height record furnished by U. S. Weather Bureau.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.2	195 525	4.0 4.4	2,360 3.110	6.0 6.4	7,100 5.320	8.4 9.2	15,800 19,610
3.0	935	4.5	3,960	6.8	9,620	10.0	23,960
3.4	1,430	5.2 5.6	4,910 5,960	7.2 7.6	11,000 12,480	10.8 11.6	28,870 34,320

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	913	970	650	563	850	1,260	3,110	8,320	20,100	6,960	1,800	924
2	902	981	804	453	900	1,360	3,740	10,600	20,600	6,520	2,030	913
3	902	880	1,250	462	950	1,560	3,420	15,800	23,400	5,960	1,950	902
4	902	762	1,110	600	950	1,720	3,010	21,700	22,300	5,560	1,720	591
5	946	880	1,090	800	900	1,800	2,820	25,700	18,600	5,160	1,570	992
6	1,050	1,130	1,070	640	950	1,870	2,820	23,400	17,200	4,780	1,510	1,100
7	1,060	1,100	1,180	401	950	2,030	2,720	21,700	16,700	4,540	1,430	1,100
8	1,000	992	1,460	200	850	1,870	2,540	21,700	16,700	4,190	1,380	1,030
9	958	804	1,400	250	850	1,800	2,720	22,800	18,100	3,960	1,360	958
10	924	700	1,210	500	850	1,870	3,210	24,500	19,600	3,740	1,360	902
11 12 13 14 15	902 902 902 902 902 1,040	730 880 924 958 970	1,040 1,030 1,030 1,020 1,030	850 750 850 850 850	900 900 950 950 950	2,450 2,820 3,110 2,720 2,360	3,420 3,310 3,630 6,960 8,960	24,500 23,400 24,000 25,100 28,200	18,100 16,700 16,200 15,800 15,800	3,520 3,310 3,210 3,110 3,110	1,390 1,380 1,310 1,240 1,180	869 847 814 804 794
16	1,160	1,030	1,030	950	950	2,540	9,290	27,600	15,400	3,110	1,160	762
17	1,100	1,070	1,040	950	900	2,630	7,550	28,900	15,800	2,820	1,130	762
18	1,020	1,210	1,060	900	950	2,630	6,660	29,500	13,700	2,630	1,110	752
19	970	1,170	1,150	900	950	2,360	6,520	32,900	13,300	2,540	1,070	741
20	946	1,050	1,120	800	900	2,110	6,960	30,200	15,800	2,450	1,040	741
21	924	992	1,060	750	900	1,870	9,290	25,100	16,700	2,280	1,040	752
22	913	958	1,070	800	900	1,800	9,620	25,700	14,500	2,190	1,020	794
23	913	869	1,210	850	950	1,950	8,010	27,000	13,700	2,110	992	836
24	924	720	1,310	850	1,000	1,950	6,960	26,300	11,700	2,030	1,050	858
25	935	592	1,340	850	1,100	1,870	6,660	28,900	10,300	1,950	1,050	847
26 27 28 29 30 31	958 946 946 924 913 902	554 480 462 426 480	1,200 1,070 1,040 1,000 891 610	900 950 950 900 900 800	1,200 1,270 1,240	1,950 2,030 2,110 2,110 2,190 2,630	7,700 10,600 11,000 9,620 8,320	30,200 30,200 30,800 27,000 21,700 20,100	9,290 8,640 8,160 7,700 7,400	1,950 2,030 1,950 1,950 1,870 1,720	1,020 981 935 924 935 924	825 825 825 814 836

Warrakh.	Second-	Maximum	Minimum		Per	Ru	n-off
Month	foot-days	naximum	ninimum	Mean	square mile	Inches	Acre-feet
October	29,599	1,160	902	955	0.197	0.23	58,710
November	25,724	1,210	426	857	.177	-20	51,020
December	33,575	1,460	610	1,083	.223	•26	66,600
Calendar year 1936	2,686,184	61,500	426	7,339	1.51	20.61	5,328,000
Jamuary	23,019	950	200	743	.153	.18	45.660
February	26,860	1.270	850	959	.198	.21	53,280
March	65,330	3.110	1.260	2.107	.434	.50	129,600
April	181,150	11,000	2.540	6.038	1.24	1.38	359.300
May	763,520	32,900	8,320	24,630	5.08	5.86	1,514,000
June	457,990	23,400	7,400	15,270	3.15	3.51	908,400
July	103,210	6,960	1,720	3,329	•686	.79	204,700
August	38 ,9 81	2,030	924	1,257	.259	.30	77,320
September	25,810	1,100	741	860	.177	.20	51,190
Water year 1936-37	1,774,768	32,900	200	4,862	1.00	13.62	3,520,000

Clearwater River at Orofino, Idaho

Location.- Wire-weight gage, lat. $46^{\circ}29^{\circ}$, long. $116^{\circ}16^{\circ}$, in NW½ sec. 7, T. 36 N., R. 2 E., at hIghway bridge in Orofino, a quarter of a mile below Orofino Creek.

Drainage area .- 5,580 square miles.

Records available .- October 1930 to September 1937.

Extremes.- Maximum discharge observed during year, 33,800 second-feet May 20 (gage height, 15.87 feet); minimum, probably less than 250 second-feet Jan. 8, during period of ice effect.

1830-37: Maximum discharge observed, 81,500 second-feet June 10, 1933 (gage height, 20.87 feet); minimum, that of Jan. 8, 1937; minimum gage height observed, 7.17 feet Dec. 4, 1935.

Remarks.- Records good except those for periods of ice effect or missing gage-heights,

Oct. 17, Nov. 11, 12, Nov. 24 to Dec. 5, Dec. 11-13, 18-20, Dec. 26 to Mar. 9, Sept.
5-9, 19, 20, which were computed on basis of one discharge measurement, gage heights,
weather records, and records for other stations in Clearwater River Basin and are fair.
No diversions above station. Regulation negligible. Gage read once daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul	y Aug.	Sept.
1 2 3 4 5	*970 940 940 940 940	940 1,000 1,000 885 *942	700 850 1,200 1,300 1,200	650 500 500 650 800	900 950 1,000 1,000	1,600 1,800 1,900	3,750 4,960 4,710 3,750 3,530	10,600 15,100	20,00 *21,20 22,30 22,80 19,50	00 6,6 00 6,6	580 2,060 020 2,150 520 2,060	1,000 940 940
6 7 8 9 10	1,000 1,120 1,060 1,000 1,000	1,000 1,190 1,120 940 830	1,190 1,190 1,400 1,640 1,480	700 450 250 350 550	1,000 1,000 950 950 950	2,300 2,200 2,100	3,320 3,530 3,110 3,320 3.750	26,400 23,400 22,300 24,000 24,600	16,00 *16,50	00 4,4	710 1,560 460 *1,520 980 1,480	1,200 1,100 1,000
11 12 13 14 15	#970 940 #940 940 940	830 950 1,000 1,000 *1,030	1,250 1,100 1,100 1,060 1,120	900 900 900 900 900	950 950 1,000 1,000	2,910 3,110 3,320	3,980 3,980 3,980 7,160 9,940	25,800 26,400 25,200 25,800 30,300	16,00	00 3,3 00 3,3	1,480 1,480 1,480 1,330	885
16 17 18 19 20	1,190 1,200 1,120 1,000 1,000	1,060 1,190 1,190 1,260 1,190	1,190 1,120 1,150 1,200 1,300	1,000 1,000 950 950 900	1,000 1,000 1,000 1,000	2,910 #2,910 2,910	11,700 9,290 8,050 7,160 7,750	33,100		00 3,1 00 *2,9 00 2,7	110 1,260 210 1,190 210 1,120	885 830 800
21 22 23 24 25	940 940 940 940 940	1,060 1,000 940 850 700	1,190 1,190 1,190 1,300 1,400	800 850 900 900 900	950 950 1,000 1,100 1,200	2,060 2,060 2,240	8,660 11,300 9,290 8,050 #7,900	26,400 27,100 27,100 26,400 28,300	*16,40	00 2,3 00 2,2 00 2,3	330 *1,000 40 1,000 150 1,060	885 885 *91 2
26 27 28 29 30 31	*970 1,000 1,000 940 *940 *940	600 550 500 480 520	1,300 1,200 1,150 1,100 1,000 700	950 1,000 1,000 950 950 900	1,300 1,400 1,400	2,240	7,750 9,940 12,100 11,300 9,610	30,300 31,700 31,700 29,000 22,800 *21,400	9,6: #8,98 8,38 7,78	30 2,0 50 2,0 50 2,0	060 1,000 150 940 060 1,000	855 940 940 #940
Г		W	<u> </u>	Sec	ond-	W4	T	·		Per	Run-off	

	Second-				Per	Run-off		
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet	
October November December	30,640 27,747 36,460	1,200 1,260 1,640	940 480 700	988 925 1,176	0.177 .166 .211	0.20 .19 .24	60,770 55,040 72,320	
Calendar year 1936	2,949,337	63,700	480	s,0 58	1.44	19.65	5,850,000	
January. February March. April. May. June. July August. September.	24,800 26,850 73,320 206,620 795,460 460,940 107,090 41,630 27,909	1,000 1,400 3,320 12,100 33,800 22,500 7,160 2,150 1,200	250 900 1,400 3,110 8,660 7,450 1,980 940 800	800 1,030 2,365 6,887 25,660 15,360 3,455 1,343 930	.143 .185 .424 1.23 4.60 2.75 .619 .241 .167	.16 .19 .49 1.37 5.30 3.07 .71 .25	49,190 57,220 145,400 409,800 1,578,000 914,300 212,400 82,570 55,360	
Water year 1936-37	1,861,466	33,800	250	5,100	.914	12.39	3,692,000	

*Discharge interpolated.

Clearwater River at Spalding, Idaho

<u>Location.</u>- Water-stage recorder, lat. $46^{\circ}25^{\circ}$, long. $116^{\circ}51^{\circ}$, in lot 22, sec. 22, T. 36 N., R. 4 W., a quarter of a mile below mouth of Lapwai Creek and three-eighths of a mile northwest of Spalding post office.

Drainage area .- 9,570 square miles.

Records available .- March 1926 to September 1937.

Average discharge.- 11 years, 14,710 second-feet.

Extremes.- Maximum discharge during year, 54,400 second-feet May 19 (gage height, 12.74 feet); minimum, probably less than 500 second-feet Jan. 9, during period of ice effect. 1926-37: Maximum discharge, 172,000 second-feet Dec. 23, 1933 (gage height, 23.19 feet); minimum, that of Jan. 9, 1937.

feet); minimum, that of Jan. 9, 1937.
Maximum stage known, 25.5 feet Jan. 5, 1928 (former datum and site, 2,300 feet upstream), during severe ice jam.

Remarks. - Records excellent except those for Nov. 17-24, which were computed on basis of staff-gage readings and stage-discharge relation at Spalding Highway bridge, 2,300 feet upstream, and are good, and those for period of missing age heights, Nov. 25-28, and of ice effect, Dec. 2, Jan. 1 to Feb. 28, which were computed on basis of records for Lewiston power plant (furnished by Washington Water Power Co.), and records for other stations in Clearwater River Basin and are fair. No diversion or regulation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 16, Nov. 25-Sept. 30

1.5	920		2,920	4.5	6,300	6.0	11,210	10.0	33,030
2.0	1,390	3.5	3,930	5.0	7.710	7.0	15,420	11.0	40,480
2.5	2,040	4.0	5,050	5.5	9.360	8.0	20.350	12.0	48,430
			•			9.0	26-200		57,060

Day	Oot.	Nov.	Dec.	Jan.	Peb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,890	1,920	1,200	1,200	1,800	3,510	10,400	18,300	33,000	11,600	3,410	2,000
2	1,860	2,010	1,400	1,000	1,900	3,510	13,600	20,400	33,000	10,400	3,820	1,980
3	1,860	1,960	1,660	1,000	2,000	3,820	11,200	28,800	36,000	9,720	4,150	1,950
4	1,860	1,760	2,640	1,300	2,000	4,370	9,010	40,500	36,000	9,360	3,720	1,940
5	1,890	1,850	2,280	1,700	1,900	4,260	9,010	48,400	30,900	8,670	3,310	1,950
6	2,040	2,120	2,200	1,400	2,000	4,480	8,670	44,400	27,500	5,020	3,110	2,200
7	2,120	2,370	2,280	1,100	2,000	4,590	8,020	39,700	26,200	7,710	3,020	2,460
8	2,120	2,280	2,820	700	1,800	4,700	7,410	38,200	25,600	7,260	2,920	2,280
9	1,980	1,950	3,210	500	1,800	4,590	8,020	39,700	26,800	6,840	2,820	2,120
10	1,920	1,670	2,820	600	1,800	4,940	9,010	42,000	28,200	6,570	2,820	1,980
11	1,890	1,550	2,370	1,800	1,900	5,660	9,360	43,600	28,800	6,170	3,020	1,900
12	1,860	1,620	2,120	1,600	1,900	7,260	9,010	43,600	25,000	5,910	3,020	1,880
13	1,850	1,810	2,120	1,800	2,000	8,670	10,400	42,000	25,000	5,660	2,920	1,820
14	1,860	1,880	2,040	1,800	2,000	8,340	21,400	43,600	23,700	5,530	2,730	1,780
15	1,900	1,890	2,040	1,800	2,000	7,260	33,000	49,300	23,700	5,410	2,640	1,760
16	2,120	1,920	2,040	2,000	2,000	8,020	31,600	47,600	23,200	5,530	2,460	1,750
17	2,200	2,060	2,040	2,000	1,900	8,340	22,600	46,800	23,200	5,290	2,460	1,720
18	2,040	2,170	2,120	1,900	2,000	8,340	18,300	47,600	22,000	5,050	2,370	1,700
19	1,950	2,380	2,200	1,900	2,000	7,120	16,400	50,900	20,900	4,700	2,280	1,680
20	1,900	2,250	2,460	1,700	1,900	6,040	16,800	50,900	22,600	4,590	2,200	1,660
21	1,880	2,000	2,370	1,600	1,900	5,290	24,300	42,800	27,500	4,370	2,200	1,660
22	1,850	1,900	2,280	1,700,	1,900	4,940	25,600	42,000	23,200	4,150	2,200	1,680
23	1,830	1,880	2,820	1,800	2,100	5,050	20,400	42,000	22,000	4,040	2,120	1,720
24	1,850	1,710	3,210	1,800	2,300	5,410	17,300	42,000	20,400	3,930	2,200	1,790
25	1,860	1,350	3,510	1,800	2,700	5,660	15,400	44,400	17,300	3,720	2,370	1,810
26 27 28 29 30 31	1,890 1,900 1,920 1,900 1,900 1,890	1,200 1,100 1,000 944 976	3,210 2,640 2,370 2,200 2,040 1,740	1,900 2,000 2,000 1,900 1,900	2,800 2,800 2,800 -	5,780 5,910 6,170 6,440 6,570 7,710	16,400 21,400 25,000 24,300 20,400	47,600 48,400 48,400 46,000 37,400 33,800	15,400 14,100 13,200 12,400 12,000	3,620 3,720 3,720 3,720 3,820 3,510	2,280 2,200 2,040 2,010 1,980 2,000	1,790 1,790 1,790 1,780 1,790
					•		T	T		Don.	Dan a	

	Second-				Per	Run-off		
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet	
October November December	59,770 53,480 72,450	2,200 2,380 3,510	1,830 944 1,200	1,928 1,783 2,337	0.201 .186 .244	0.23 .21 .28	118,600 106,100 143,700	
Calendar year 1936	5,156,880	101,000	944	14,090	1.47	20.04	10,230,000	
January February March April May June June July August September	48,900 57,900 182,750 493,720 1,301,100 718,800 182,310 82,800 56,110	2,000 2,800 8,670 33,000 50,900 36,000 11,600 4,150 2,460	500 1,800 3,510 7,410 18,300 12,000 3,510 1,980 1,660	1,577 2,068 5,895 16,460 41,970 23,960 5,881 2,671 1,870	.165 .216 .616 1.72 4.39 2.50 .615 .279 .195	.19 .22 .71 1.92 5.06 2.79 .71 .32 .22	96,990 114,800 362,500 979,300 2,581,000 1,426,000 361,600 164,200 111,300	
Water year 1936-37	3,310,090	50,900	500	9,069	.948	12.86	6,566,000	

Lochsa River near Lowell, Idaho

Location. Water-stage recorder, lat. 46°09', long. 115°35', in SW\sE\ sec. 33, T. 33

N., R. 7 E., three-quarters of a mile by river northeast of Lowell post office, seven-eighths of a mile above mouth, and l\ miles below Pete King Creek.

Drainage area. - 1,180 square miles.

Records available.- October 1929 to September 1937. November 1910 to August 1912, (gageheight records only), at approximately same site.

Extremes.- Maximum discharge during year, 12,100 second-feet May 18 (gage height, 7.65 feet); minimum, probably less than 100 second-feet Jan. 8, during period of ice effect. 1929-37: Maximum discharge, 34,800 second-feet June 10, 1933 (gage height, 13.44 feet); minimum, that of Jan. 8, 1937.

Remarks. - Records good except those for periods of ice effect, Nov. 24 to Dec. 25, Dec. 31 to Mar. 13, which were computed on basis of weather records, two discharge measurements, and records for Clearwater River at Kamiah and other stations in Clearwater River Basin and are fair. No diversions.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.1	211	3.1	2.030	4.7	4.710	6.3	8,510
1.5	415	3.5	2,600	5.1	5.570	6.7	9.580
1.9	705	3.9	3,230	5.5	6.510	7.1	10,680
2.3	1,075	4.3	3,930	5.9	7.490	7.5	11,520
2.7	1,520				•		

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	317 312 312 317 344	339 323 267 253 328	225 275 375 360 350	170		410 450 500 550 580	1,140 1,200 1,020 928 899	2,680 3,750 5,920 7,990 9,040	7,740 7,990 9,040 8,250 6,990	2,310 2,170 1,960 1,850 1,720	681 714 673 602 565	333 328 323 317 373
6 7 8 9	385 361 344 328 328	379 373 317 272 253	350 375 475 450 400			620 650 600 580 600	899 826 835 928 1,040	8,250 7,740 7,990 5,510 9,040	6,390 6,150 6,150 6,750 6,990	1,620 1,520 1,420 1,340 1,270	52 9 5 1 5 501 494 529	391 367 344 328 317
11 12 13 14 15	328 323 317 328 409	282 306 328 344 350	340 340 340 340 340			750 900 1,000 835 722	1,090 1,000 1,530 2,750 3,230	9,310 8,770 8,770 9,850 10,400	6,390 5,800 5,680 5,680 5,570	1,190 1,140 1,100 1,080 1,080	529 501 480 460 448	306 296 291 291 287
16 17 18 19 20	379 355 339 328 328	350 373 403 379 344	340 350 350 375 360	290		835 853 871 722 6 41	2,750 2,240 2,030 2,100 2,170	10,100 10,400 11,000 11,800 11,000	5,460 5,460 4,710 4,820 5,800	1,060 995 918 871 835	428 415 403 391 385	282 277 277 277 277
21 22 23 24 25	323 317 317 323 328	339 328 296 250 200	350 350 400 450 425			588 572 618 588 610	3,320 2,910 2,520 2,170 2,170	9,310 9,580 9,580 9,850 10,700	5,460 4,920 4,710 3,930 3,400	790 756 722 697 673	373 367 379 409 391	282 287 296 317 306
26 27 28 29 30 31	328 328 317 317 301 306	190 170 160 150 160	397 355 333 333 282 200			610 641 697 689 782 918	2,680 3,480 3,320 2,750 2,450	11,500 11,000 11,000 9,580 7,990 7,740	3,150 2,910 2,750 2,600 2,450	673 665 657 689 649 602	373 355 339 339 339 333	301 296 296 306 317

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	10,287 8,806 10,985	409 403 475	301 150 200	332 294 354	0.281 .249 .300	0.32 .28 .35	20,400 17,470 21,790
Calendar year 1936	925,954	21,000	150	2,530	2.14	29.18	1,837,000
Jameary February March March April May June June July August September	7,790 9,100 20,982 58,375 280,140 164,090 35,022 14,240 9,286	1,000 3,480 11,800 9,040 2,310 714 391	410 826 2,680 2,450 602 333 277	251 325 677 1,946 9,037 5,470 1,130 459 310	.213 .275 .574 1.65 7.66 4.64 .958 .389 .263	.25 .29 .66 1.84 8.83 5.18 1.10 .45	15,450 18,050 41,620 115,800 555,600 325,500 69,470 28,240 18,420
Water year 1936-37	629,103	11,800	-	1,724	1.46	19.84	1,248,000

South Fork of Clearwater River near Grangeville, Idaho

Location. - Staff gage, lat. 45°55', long. 116°01', in SE\frac{1}{2} NW\frac{1}{2} sec. 30, T. 30 N., R. 4 E., below power house of Washington Water Power Co., 6 miles southeast of Grangeville.

Drainage area. - 865 square miles.

Records available .- November 1910 to September 1916, April 1923 to September 1937.

Average discharge. - 18 years (1912-16, 1923-37), 814 second-feet.

Extremes. Maximum discharge observed during year, 3,550 second-feet May 5 (gage height, 7.00 feet); minimum, probably less than 50 second-feet Jan. 7, during period of ice

effect. 1910-16, 1923-37: Maximum discharge, 9,830 second-feet May 30, 1912 (gage height, 9.7 feet); practically no flow for indeterminate periods Aug. 24, 26, 1935.

Remarks.- Records good except those for October to February and Aug. 15 to Sept. 30, which are fair. Diurnal fluctuations caused by operation of power plant just above station. No diversions for irrigation. Gage read twice daily. Gage-height record furnished by Washington Water Power Co.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Oct. 1 to Dec. 30)

2.2

42 98 4.6 5.0 5.4 5.8 1,005 1,310 1,660 2.6 3.4 3.8 2,050 334 4.2 745 6.6 3,000 7.0

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	128	78	60	110	137	294	1,310	1,570	685	240	95
2	113	104	83		115	152	377	1,750	1,570	630	257	93
3	96	84	109		120	149	334	2,380	1,660	575	223	93
4	96	100	124		120	149	334	3,000	1,480	522	192	91
5	106	124	111		115	159	294	3,550	1,310	496	181	100
6	104	144	126		115	144	294	2,740	1,230	471	154	142
7	104	121	126		117	170	276	2,500	1,150	423	159	130
8	104	100	132		119	164	276	2,380	1,150	423	154	96
9	102	80	146		109	170	334	2,620	1,570	400	156	95
10	86	84	126		93	181	400	2,870	2,050	377	154	93
11	91	95	104		120	208	423	2,740	1,660	356	152	91
12	100	98	126		120	223	377	2,740	1,850	334	154	86
13	83	98	130		117	257	496	2,870	1,660	314	154	88
14	95	104	128		115	240	805	3,000	1,480	314	121	90
15	119	1 11	132		117	257	1,150	3,270	1,400	400	128	83
16	170	98	146)	119	276	1,000	2,870	1,400	334	135	53
17	146	137	124		115	257	805	3,000	1,400	314	117	90
18	104	152	128		121	276	805	3,000	1,310	276	115	88
19	111	137	130		130	22 5	902	3,000	1,230	276	113	56
20	111	124	132		121	208	1,000	2,740	1,310	257	128	88
21	78	119	126		117	192	1,230	2,270	1,400	223	128	90
22	108	90	130		119	181	1,000	2,380	1,230	223	96	95
23	108	78	154		119	208	870	2,380	1,310	223	146	109
24	108	76	154		119	192	715	2,270	1,080	208	130	115
25	108	7 5	149		119	208	902	2,380	1,000	208	109	98
26 27 28 29 30 31	113 111 95 75 93 95	72 70 62 81 78	142 132 121 128 93 80		142 137 132 - -	223 223 240 223 240 257	1,230 1,750 1,480 1,230 1,000	2,270 2,160 2,270 1,950 1,660 1,570	902 838 805 745 716	240 257 223 240 223 192	130 93 90 91 90 93	102 100 98 100 93

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Aore-feet
October	3,228	170	75	104	0.120	0.14	6,400
November	3.024	152	62	101	.117	.13	6.000
December	3,850	154	78	124	.143	.16	7,640
Calendar year 1936	258,722	6,090	62	707	.817	11.10	513,200
January	2,910	_	-	93.9	.109	.13	5,770
February	3,332	142	93	119	.138	.14	6,610
March	6.387	276	137	206	.238	.27	12,670
April	22.383	1.750	276	746	.862	.96	44.400
May	77,890	3,550	1,310	2.513	2.91	3.36	154,500
June	39,465	2,050	715	1,316	1.52	1.70	78,280
July	10,637	685	192	343	397	.46	21,100
August	4.383	257	90	141	.163	.19	8,690
September	2,901	142	83	96.7	.112	.12	5,750
Water year 1936-37	180,390	3,550	-	494	.571	7.76	357,800
3		i :		l	1		

North Fork of Clearwater River near Ahsahka, Idaho

Location. Water-stage recorder, lat. $46^{\circ}31'$, long. $116^{\circ}18'$, in SE½ sec. 26, T. 37 N., R. I E., at Bruce's Eddy, 1½ miles northeast of Ahsahka and 2 miles above mouth.

Drainage area. - 2,440 square miles.

Records available .- August 1926 to September 1937.

Average discharge.- ll years, 5,630 second-feet. Average discharge for 10 years, ending in 1936, 5,850 second-feet; figure published in W.S.P. 813 in error.

Extremes. - Maximum discharge during year, 20,600 second-feet May 5 (gage height, 14.82 feet); minimum, probably less than 250 second-feet Jan. 8, during period of ice effect.

1926-37: Maximum discharge, about 100,000 second-feet Dec. 23, 1933 (gage height, 35.5 feet, from floodmarks); minimum, that of Jan. 8, 1937.

Remarks. - Records good except those for periods of ice effect or missing gage heights, Jan 1 to Mar. 5, Mar. 29-31, which were computed on basis of weather records, gage heights, one discharge measurement, and records for stations in the same basin and are fair. No diversion or regulation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	882 882 882 882 995	855 882 725 700 938	530 590 995 1,060 995	450		1,200 1,300 1,400 1,600 1,700	4,300 5,080 4,040 3,400 3,520	7,660 9,940 14,200 18,000 19,000	11,900 11,900 12,600 11,900 10,600	4,300 4,040 3,780 3,650 3,400	1,530 1,940 1,730 1,530 1,460	995 995 965 965 1,020
6 7 8 9 10	1,060 995 938 910 882	1,060 995 910 750 678	938 1,120 1,610 1,420 1,180	430		1,860 1,900 1,860 1,770 1,770	3,400 3,160 3,040 3,520 4,040	16,100 14,600 14,000 14,600 15,900	9,940 9,260 8,770 9,090 9,090	3,160 3,040 2,920 2,610 2,700	1,380 1,320 1,280 1,280 1,420	1,220 1,180 1,060 995 938
11 12 13 14 15	882 855 855 882 938	725 775 855 855 855	1,020 910 910 938 938			1,940 2,430 2,920 2,860 2,280	4,040 3,650 5,640 11,000 15,000	16,400 15,900 15,700 17,100 18,300	9,430 8,290 7,810 7,510 7,660	2,540 2,430 2,380 2,430 2,330	1,490 1,420 1,320 1,280 1,220	910 910 882 882 882
16 17 18 19 20	995 910 882 882 855	910 965 1,020 1,020 910	910 910 938 1,060 1,180	800		2,230 2,380 2,590 2,380 2,040	12,600 8,930 7,510 7,210 7,360	17,300 16,600 16,400 17,300 17,100	7,510 7,360 6,760 7,810 8,770	2,280 2,180 2,080 1,990 1,900	1,180 1,180 1,150 1,120 1,080	882 855 855 828 828
21 22 23 24 25	855 828 855 855 855	882 855 828 750 655	1,060 1,280 1,610 1,860 1,810			1,770 1,650 1,690 1,730 1,810	12,400 10,400 8,130 6,910 6,480	14,600 14,600 13,800 14,000 15,000	8,770 7,660 7,660 6,910 6,200	1,810 1,770 1,690 1,650 1,610	1,060 1,060 1,060 1,180 1,220	855 855 855 882 856
26 27 28 29 30 31	855 855 855 828 828 828	632 570 495 445 478	1,420 1,150 1,060 995 910 775			1,900 1,940 1,990 2,100 2,300 3,100	7,970 10,600 10,800 9,260 7,660	16,600 16,400 16,800 15,500 12,800 12,100	5,640 5,220 4,950 4,690 4,430	1,570 1,570 1,530 1,690 1,610 1,490	1,120 1,060 995 995 965 995	882 866 882 882 910

Month	Second-	Maximum	Minimum	١	Per	Run-off	
nonth	foot-days	oot-days "Aximum		Mean	square mile	Inches	Acre-feet
October. November. December.	27,541 23,973 34,082	1,060 1,060 1,860	82 8 445 530	888 799 1,099	0.364 .327 .450	0.42 .36 .52	54,630 47,550 67,600
Calendar year 1936	1,895,447	37,200	445	5,179	2.12	28.88	3,759,000
January Pebruary Hisroh April Hisy June July August September	21,300 25,200 62,390 211,050 474,300 246,090 74,330 39,020 27,760	3,100 15,000 19,000 12,600 4,300 1,940 1,220	1,200 3,040 7,660 4,430 1,490 965	687 900 2,013 7,035 15,300 8,203 2,398 1,259 925	.282 .369 .825 2.88 6.27 3.36 .983 .516	.33 .38 .95 3.21 7.23 3.75 1.13 .59	42,250 49,980 123,700 418,600 940,800 488,100 147,400 77,400 55,060
Water year 1936-37	1,267,036	19,000	-	3,471	1.42	19.29	2,513,000

South Fork of Palouse River above Paradise Creek, near Pullman, Wash.

Location. - Water-stage recorder, lat. 46°42'20", long. 117°09'55", in SE½ sec. 8, T. 14

N., R. 45 E., 1 mile above Paradise Creek and 2 miles southeast of Pullman.

Drainage area. - 81.1 square miles.

Records available .- May 1934 to September 1937.

Extremes. - Maximum discharge during year, 429 second-feet Apr. 15 (gage height, 5.17 feet); no flow July 28-31, Aug. 5 to Sept. 22. 1934-37: Maximum discharge, 517 second-feet Feb. 28, 1936 (gage height, 6.25 feet); no flow frequently during late summer months.

Remarks.- Records good except those for period of ice effect, Jan. 8 to Feb. 27 (computed on basis of eight discharge measurements, and records for station at Pullman), which are poor. Discharge June 8-11 computed on basis of general information. Artificial control consisting of a modified Parshall flume and low ogee-type dam used except for periods Oct. 1 to Jan. 7, July 2 to Aug. 4, Sept. 23-30, when a 2-foot or 6-inch Cippoletti weir was inserted in the flume and discharge was determined from weir formulas. No diversions or regulation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	0.03 .04 .04 .04	0.29 .25 .26 .37	0.32 .29 .26 .32 .43	0.64 .39 .47 .56	0.90	54 158 163 188 144	92 72 50 52 64	22 20 19 18 18	3.3 3.0 2.5 2.2 2.1	1.3 1.6 1.0 .89	0.02 .05 .04 .02	0 0 0
6 7 8 9 10	.14 .12 .12 .14 .16	.42 .32 .32 .32 .32 .29	1.2 1.8 1.3 1.5	.43 .19 } .10	} .90	139 125 117 127 214	69 46 33 59 99	17 15 13 15 13	2.1 2.0 1.8 3.0 6.0	.74 .64 .60 .56	0 0 0 0	0 0 0
11 12 13 14 16	.18 .18 .20 .19	.32 .32 .36 .32 .32	.84 .74 .74 .74	.22	} 1.0	214 196 179 103 94	56 32 115 133 348	17 14 13 12 11	5.8 3.8 2.5 2.1 2.0	.43 .43 .36 .39	0 0 0	0000
16 17 18 19 20	.20 .22 .22 .24	.36 .39 .36 .36	.65 .74 .89 .84	.44	} .90	154 104 142 66 58	159 96 67 55 83	10 8.6 8.4 7.6 7.0	2.2 3.3 3.3 4.1 8.1	.39 .43 .29 .16	00000	00000
21 22 23 24 25	.22 .30 .29 .28	.32 .32 .32 .32 .32	.94 1.2 1.0 1.8 1.7	.68	1.8 5.9 11 34 33	50 41 44 44 41	166 76 53 46 39	6.1 5.7 5.5 5.4 5.2	13 5.7 9.2 5.3 3.3	.06 .04 .03 .02 .02	0000	0 0 .17 .20 .12
26 27 28 29 30 31	.30 .28 .24 .29 .19	.52 .32 .32 .32 .32	1.4 1.1 1.0 .84 .74 .69	.90	30 25 34 - -	37 37 34 32 38 61	33 30 36 41 27	5.1 4.7 4.4 4.3 4.1 3.7	2.5 2.2 1.9 1.6 1.5	.02 .01 0 0	0 0 0 0	.08 .08 .08 .12 .17

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October	5.81	0.30	0.03	0.187	0.0021	0.002	12
November	9.91	.44	.25	.330	.0041	.005	20
December	28.74	1.8	.26	.927	.011	.013	5 7
Calendar year 1936	5,683.10	365	0	15.5	.191	2.606	11,270
January	15.68	-	_	.506	.0062	.007	31
February	193.20	34	- 1	6.90	.085	.089	383
March	3.198	214	32	103	1.27	1.464	6.340
April	2,327	348	27	77.6	.957	1.068	4,620
May	330.8	22	3.7	10.7	.132	.152	656
June	111.4	13	1.5	3.71	.046	.051	221
July	12.22	1.6	0	.394	.0049	.006	24
August	.13	.05	0	.004	.00005	.00006	.26
September	1.02	.20	0	.034	.00042	.0005	2.0
Water year 1936-37	6,233.91	348	0	17.1	.211	2.858	12,370
						1 1	

South Fork of Palouse River at Pullman, Wash.

Location. - Water-stage recorder, lat. 46°43'50", long. 117°11'00", in NE2 sec. 6, T. 14
N., R. 45 E., 600 feet above Missouri Flat Creek at State Street crossing, Pullman.

Drainage area .- 132 square miles.

Records available .- February 1934 to September 1937.

Extremes. - Maximum discharge during year, 731 second-feet Apr. 15 (gage height, 3.84 feet); minimum, 0.29 second-foot Aug. 21. 1934-37: Maximum discharge, 940 second-feet Jan. 24, 1935 (gage height, 3.87 feet); minimum, 0.29 second-foot Aug. 25, 1936, and Aug. 21, 1937.

Remarks.- Records excellent except those below 20.0 second-feet, which are good, and those for period of ice effect, Jan. 10-14 (computed on basis of general information), which are poor. Artificial control consisting of a low ogee-type dam and 6-foot sharp-crested Cippoletti weir used except for period Aug. 12 to Sept. 30, when a 2-foot sharp-crested Cippoletti weir was used and discharge was computed from weir formulas. No important diversions. Slight regulation caused by Moscow sewage-disposal plant on Paradise Creek.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	0.79 1.1 .90 1.2 1.0	1.4 1.1 1.4 1.6 1.7	1.4 1.4 1.5 1.6 1.8	1.8 1.5 1.6 1.8 2.0	2.4 2.7 2.7 2.9 2.9	76 278 298 296 218	145 130 82 92 109	32 28 26 26 24	5.8 5.4 5.0 4.5 4.1	3.4 2.9 2.7 2.3 2.1	1.1 1.1 .83 .93	0.64 .77 .60 .69
6 7 8 9 10	.79 .90 1.0 1.4 1.1	1.7 1.6 1.6 1.5 1.6	3.4 5.2 4.1 4.1 2.9	1.6 1.0 .48 .48	2.9 2.7 2.7 2.7 2.7	266 244 220 232 402	110 70 49 88 136	22 21 19 17 18	3.9 3.5 4.5 9.7	2.0 2.1 1.8 1.7 1.8	.83 .62 .62 .62 1.0	1.8 .99 .64 .64
11 12 13 14 15	1.4 1.0 1.2 1.7 1.5	1.7 1.6 1.6 1.7 1.6	2.2 2.1 2.4 2.1 2.2	.70 .90 1.0 1.2 1.4	3.0 4.1 4.3 4.1 3.6	391 344 296 162 152	96 52 228 227 562	24 19 18 17 15	9.3 6.7 4.8 4.5 4.6	1.7 1.6 1.7 2.0 1.6	1.2 .85 .94 .75 .61	.64 .60 .64 .69
16 17 18 19 20	1.6 1.4 1.7 1.4 1.4	1.6 1.7 1.7 1.7	2.1 2.5 2.9 2.4 2.1	1.6 1.7 1.8 2.0 2.0	3.4 3.0 2.9 2.5 2.9	265 162 242 110 99	235 141 99 75 137	14 12 12 11 10	5.5 7.5 6.7 8.3 13	1.6 1.7 1.5 1.4 1.2	.51 .62 .51 .56	.69 .79 .84 .89
21 22 23 24 25	1.2 1.6 1.5 1.5	1.7 1.6 1.5 1.5	2.5 3.6 3.4 5.2 4.5	2.2 2.4 2.4 2.5 2.7	7.4 15 24 53 68	56 70 79 72 62	262 112 79 62 52	9.5 9.1 5.5 8.2 8.2	17 12 16 9.6 6.4	1.2 1.1 1.1 1.0 .93	.51 .62 .56 .69	.97 .94 .84 .84
26 27 28 29 30 31	1.4 1.5 1.4 1.4 1.4	1.5 1.4 1.5 1.4 1.4	2.9 2.7 2.4 2.4 1.8 2.0	2.9 2.4 2.5 2.7 2.5 2.5	60 47 52 -	56 54 51 46 56 89	45 41 52 60 39	8.0 7.4 7.2 6.8 6.4 6.0	5.4 4.3 4.1 3.4 3.0	.93 .93 1.3 .93 1.0	.60 .74 .60 .88 .51	.94 .94 .84 .89 .84

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October	40.28 46.8 83.8	1.7 1.7 5.2	0.79 1.1 1.4	1.30 1.56 2.70	0.010 .012 .020	0.012 .013 .023	80 93 166
Calendar year 1936	9,204.52	586	.39	25.1	.190	2.589	18,260
Jamery February Rarch April Ray Jun Jun Jun September	54.76 387.5 5,474 3,667 470.3 202.4 50.32 22.64 24.75	2.9 68 402 562 32 17 3.4 1.2 1.8	.48 2.4 46 39 6.0 3.0 .93 .51	1.77 13.8 177 122 15.2 6.75 1.62 .730	.013 .105 1.34 .924 .115 .051 .012 .0055 .0062	.015 .109 1.545 1.031 .133 .057 .014 .006	109 769 10,860 7,270 933 401 100 45
Water year 1936-37	10,524.55	562	.48	28.8	.218	2.965	20,880

Paradise Creek near Pullman, Wash.

Location.- Water-stage recorder, lat. $46^{\circ}43^{\circ}10^{\circ}$, long. $117^{\circ}09^{\circ}30^{\circ}$, in SW2 sec. 4, T. 14 N., R. 45 E., 2,500 feet above mouth and 1 mile southeast of Pullman.

Drainage area .- 37.0 square miles.

Records available .- April 1934 to September 1937.

Extremes. - Maximum discharge during year, 280 second-feet Apr. 15 (gage height, 3.03 feet); minimum, 0.19 second-foot Aug. 20. 1934-37: Maximum discharge, 326 second-feet Mar. 2, 1936; minimum, 0.13 second-foot July 21, 1936.

Remarks.- Records excellent except those for periods of ice effect, Jan. 1-25, Feb. 22-27

(Computed on basis of occasional open channel gage readings, ten discharge measurements, and records for stations on South Fork of Palouse River at Pullman, and above Paradise Creek), which are fair. Discharge interpolated Sept. 17-22. Artificial control consisting of a modified Parshall flume and low ogee-type dam used except for periods Oct. 1 to Feb. 1, May 19 to Sept. 30, when a 2-foot cippoletti weir was used and discharge was determined from weir formulas. No important diversions. Slight fluctuation caused by Moscow sewage-disposal plant.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	0.64 .76 .71 .74	0.64 .51 .74 .89 .84	0.79 .89 .89 .59	0.79 .74 .74 .69	1.0 1.0 1.1 1.1 1.2	9.1 50 72 66 49	49 33 21 31 34	8.7 7.6 5.9 5.9	1.3 1.3 1.2 1.2	1.1	.69 .36 .74	0.56 .47 .51 .56
6 7 8 9 10	.60 .69 .74 .92	.69 .69 .71 .60	1.6 2.6 1.6 1.6	.74 .51 .26 .29	1.0 1.0 .96 1.0	94 101 92 99 153	32 19 14 26 32	5.5 5.2 4.8 4.3 4.6	1.0 .99 1.1 1.2 2.e	.6	94 .47 79 .47 59 .56	1.4 .69 .56 .56
11 12 13 14 15	.82 .47 .70 .72 .69	.78 .76 .75 .79	.84 1.1 .99 .79 1.0	.47 .51 .60 .70	.96 1.4 1.5 1.2 1.0	139 122 81 54 54	28 17 76 65 188	6.1 4.3 4.6 3.9 3.4	2.2 1.4 1.2 1.2 1.3	1.2 1.0	74 .60 .51 .47	.60 .56 .47 .60
16 17 18 19 20	.86 .60 .84 .60	.69 .74 .79 .79	.92 1.1 1.2 1.0	> •90	1.1 .96 .89 .70 .96	82 48 73 32 32	64 41 29 22 51	3.0 2.8 2.6 2.2	1.8 2.4 1.8 2.8 3.9	.7	74 .47 79 .39 59 .36	.64 .66 .68 .70
21 22 23 24 25	.51 .81 .79 .74	.84 .81 .64 .83	.77 1.4 1.1 2.1 1.5	1.0	1.6 3.6 6.0 9.1	28 21 28 21 17	78 31 21 17 14	2.2 2.0 1.7 1.6 1.6	3.3 3.4 3.0 2.2 1.7	.6	.39 .39 .4 .60	.74 .76 .79 .79
26 27 28 29 30 31	.60 .74 .69 .69 .74	.79 .60 .69 .79 .74	.74 1.0 .74 .90 .64	1.1 1.2 1.3 1.1 1.2	11 6.7 7.9	1 <u>5</u> 1 <u>5</u> 13 12 16 23	12 11 16 18 10	1.8 1.6 1.5 1.3 1.4	1.4 1.3 1.2 .94		50 .47 59 .43 56 .64 17 .47	.79 .79 .79 .79
<u> </u>		Month			sond-	Maximm	Minimu	m Me		Per	Run-o	ff
1		nonth		I foot	-dewa	LISTYTHIM	minimu	m i ue	an s	dnate _		

w	Second-	V	w		Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	21.78 22.27 34.59	0.92 .89 2.6	0.47 .51 .64	0.703 .742 1.12	0.019 .020 .030	0.022 .022 .035	43 44 69
Calendar year 1936	2,649.52	200	.26	7.24	.196	2.668	5,260
January. February March April May June July August September.	25.61 76.93 1,711.1 1,100 113.1 52.57 23.19 15.60 21.12	1.3 11 153 188 8.7 39 1.2 .79	.26 .70 9.1 10 1.3 .94 .47 .29	.826 2.75 55.2 36.7 3.65 1.75 .748 .503	.022 .074 1.49 .992 .099 .047 .020 .014	.025 .077 1.718 1.107 .114 .052 .023 .016	51 153 3,390 2,180 224 104 46 31 42
Water year 1936-37	3,217.86	188	.26	8.02	.238	3.232	6,380

Dry Fork of South Fork of Palouse River at Pullman. Wash.

Location.- Water-stage recorder, lat. 46°43'25", (lat. 46°32'25" as published in Water Supply Paper 813 in error), long. 117°11'10", in NE\SE\ sec. 6, T. 14 N., R. 45 E., half a mile above mouth, at Pullman.

Drainage area. - 7.6 square miles.

Records available .- December 1934 to September 1937.

Extremes. - Maximum discharge during year, 127 second-feet Mar. 2 (gage height, 2.64 feet);
no flow Oct. 1 to Dec. 5, Jan. 1 to Feb. 21, May 31 to June 9, June 30 to Sept. 30.
1934-37: Maximum discharge, 159 second-feet Feb. 27, 1936 (gage height, 2.76 feet);
no flow for long periods each year.

Remarks.- Records good. Discharge computed on basis of general information and recorded range of stage Dec. 6, 31, Mar. 28, May 13. Artificial control consisting of modified Parshall flume and low ogee-type dam used except for periods Dec. 7-30, Apr. 26 to June 29, when a 2-foot or 6-inch Cippoletti weir was inserted in the flume and discharge was computed from weir formulas. No diversions or regulation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul y	Aug.	Sept.
1 2 3 4 5			0 0 0 0		00000	16 66 39 26 13	13 3.9 2.9 8.3 3.8	0.37 .24 .18 .12 .12	0 0 0 0			
6 7 8 9			.01 .03 .06 .03		00000	16 8.8 9.1 11 12	7.6 2.3 1.5 4.9 5.8	.12 .12 .10 .10	0 0 0 0			
11 12 13 14 15			.00 .00 .00 .01		00000	9.7 11 5.9 5.2 7.4	3.1 1.5 18 18 20	.46 .22 .18 .12 .07	.04 .02 .01 .01			
16 17 18 19 20			.01 .03 .04 .03		00000	9.7 6.9 9.6 3.9 5.3	4.3 2.9 2.2 1.3	.06 .04 .03 .02	.06 .05 .08 .11 .33			
21 22 23 24 25			.04 .05 .03 .12 .07		0 2.7 5.6 17 23	3.0 2.9 2.5 1.8 1.6	6.2 2.8 1.4 1.1 .90	.02 .03 .03 .02 .03	.18 .31 .79 .16			
26 27 28 29 30 31			.03 .02 .03 .02 .01		17 9.2 11 - -	1.5 1.3 1.2 1.1 3.7 5.3	.72 .59 1.0 1.0 .56	.02 .02 .02 .02 .01	.03 .01 .01 .01			

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October	°,71	0 0 .12	000	0 0 .023	0 0 .0030	0 0 •003	0 0 1.4
Calendar year 1936	501.00	76	0	1.37	.1eo	2,450	994
January. February March April May June July August September	0 85.5 317.4 155.57 3.12 2.42 0 0	0 23 66 20 •46 •79 0		0 3.05 10.2 5.19 .101 .081 0	0 .401 1.34 .683 .013 .011 0	0 .418 1.545 .762 .015 .012 0	0 170 630 309 6.2 4.8 0
Water year 1936-37	564.72	66	0	1.55	.204	2.755	1,120

Missouri Flat Creek at Pullman, Wash.

Location.- Water-stage recorder, lat. 46°43'50", long. $117^{\circ}11'00$ ", in NE½ sec. 6, T. 14 N., R. 45 E., 600 feet above mouth at State Street crossing in Pullman.

Drainage area .- 27.5 square miles.

Records available .- February 1934 to September 1937.

Extremes. - Maximum discharge during year, 328 second-feet Apr. 15 (gage height, 2.74 feet); no flow Nov. 22, 27, Jan. 1 to Feb. 13, Aug. 24 to Sept. 22. 1934-37: Maximum discharge, 388 second-feet Mar. 2, 1936 (gage height, 2.83 feet); no flow for long periods each year.

Remarks.- Records good except those for Oct. 2-14 (interpolated), and those for periods OT Ice effect, Nov. 24 to Dec. 7, Dec. 23, 24, 31, Feb. 14-16, 22, 23 (computed on basis of two discharge measurements, occasional open-water gage heights, and general information), which are poor. Artificial control consisting of a modified Parshall flume and low ogee-type dam used except for periods Oct. 1 to Dec. 1, Dec. 8-30, May 17 to June 9, June 14-18, June 28 to Sept. 30, when a 1-foot Cippoletti weir or 3-inch rectangular weir was inserted in the flume and discharge was determined from weir formulas. No diversions or regulation.

Discharge, in second-feet, water year October 1936 to September 1937

			_									
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5	0.01 .01 .01 .01	0.01 .01 .01 .01	0.01 .01 .01 .02 .02		0 0 0	13 78 79 68 51	40 21 14 28 23	2.4 1.7 1.4 1.1	0.11 .10 .07 .04	0.1	0 .02 0 .02 8 .01	00000
6 7 8 9 10	.01 .01 .01 .01	.03 .01 .01 .01	.08 .20 .08 .11		0 0 0 0	110 78 76 73 111	24 11 7.8 18 19	.99 .93 .82 .72 .94	.03 .04 .05 .53	.0: .0: .0:	02 3 .02 3 .02	0 0 0
11 12 13 14 15	.01 .01 .01 .01	.01 .01 .01 .01	.03 .02 .03 .03		0 0 0 .01		16 7.5 60 50 130	1.4 1.1 .99 .77	1.9 .56 .30 .25 .28	.0:	.01 2 .01 2 .01	0 0 0
16 17 18 19 20	.01 .01 .01 .01	.01 .01 .01 .01	.03 .08 .15 .13		.10 .14 .10 .10	38 56 24	26 20 14 9.0 37	.53 .48 .50 .42 .35	.63 .59 .99 .79 2.8	.0: .0: .0:	.01 .01 .01	0 0 0 0
21 22 23 24 25	.01 .01 .01 .01	.01 .01 .01	.15 .21 .16 .47		.58 4.9 6.5 7.8 6.7	20 17 21 15 14	32 15 8.2 6.2 4.9	.32 .30 .39 .28 .28	1.5 4.4 3.4 .99 .72	.0: .0: .0:	0.01	0 0 .01 .01
26 27 28 29 30 31	.01 .01 .01 .01 .01	.01 .01 .01	.23 .16 .14 .14 .08		6.0 5.6 5.7	12 11 9.5 8.2 14 19	3.7 3.1 5.3 6.8 3.4	.28 .21 .17 .17 .17	.40 .35 .25 .17 .16	.0:	5 0 5 0 6 0	.01 .01 .01 .01
		V		Se	cond-	Maximm	Minim			Per	Run-o	ff
		Month						ım I Ma		uara 🗀		

Warran.	Second-	W	w	١	Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	0.31 .32 3.53	0.01 .03 .47	0.01 0 .01	0.010 .011 .114	0.00036 .00040 .0041	0.0004 .0004 .005	0.61 .63 7.0
Calendar year 1936	1,927.17	165	0	5.27	.192	2.600	3,820
January February Harch April Hay Jun Jun July August September	6 44.36 1,425.7 665.9 21.97 24.32 .97 .30	0 7.8 111 130 2.4 4.4 .17 .02	0 8.2 3.1 .03 .01 0	0 1.58 46.0 22.2 .709 .811 .031 .010	0 .057 1.67 .807 .026 .029 .0011 .00036	0 .059 1.925 .900 .030 .032 .001 .0004 .0001	0 88 2,830 1,320 44 48 1.9 .60
Water year 1936-37	2,157.77	130	0	5.99	.218	2.953	4,340

Fourmile Creek at Shawnee, Wash.

Location. - Water-stage recorder, lat. 46°49'55", long. 117°16'20", in SW\u00e4NE\u00e4 sec. 33, T. 18 N., R. 44 E., half a mile above mouth and three-quarters of a mile north of Shaymee

Drainage area. - 71.9 square miles.

Records available .- March 1934 to September 1937.

Extremes. - Maximum discharge during year, 487 second-feet Mar. 3 (gage height, 3.33 feet); no flow Oct. 1 to Nov. 26, Jan. 8 to Feb. 11, July 12 to Sept. 30. 1934-37: Maximum discharge, 786 second-feet Jan. 24, 1935 (gage height, 4.13 feet): no flow for long periods each year.

Remarks.- Records excellent except those for period of ice effect, Feb. 12 to Mar. 1 (Computed on basis of observations on staff gage in unobstructed flume section, relation between flume gage and well gage, and from general information), and those for Jan. 5-7, Mar. 5, 10, 11, Apr. 8-16, 25-25 (computed on basis of partial gage-height record and general information), which are fair. Artificial control consisting of a modified Parshall flume and low ogee-type dam used except for periods Nov. 27 to Dec. 6, Dec. 11 to Jan. 7, May 20 to July 11, when a 2-foot or 6-inch Cippoletti weir was inserted in the flume and discharge was determined from weir formulas. No diversion or regulation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 2 3 4 5		0 0 0 0	0.02 .02 .02 .06 .12	0.20 .10 .10 .15	0 0 0	59 263 321 277 174	95 57 39 66 71	10 8.2 6.8 5.6 5.1	0.51 .43 .34 .28	0.32 .23 .23 .20 .12		
6 7 8 9 10		00000	.31 1.2 1.0 .83 .51	.15 .08 0 0	0 0 0	208 134 115 119 155	68 36 29 49 58	4.9 4.3 3.8 3.6 3.9	.18 .18 .1s .30 2.7	.0e .08 .04 .04		
11 12 13 14 15		0 0 0 0	.26 .20 .29 .47 .51	0 0 0 0	0 .3 .4 .5	148 152 99 75 83	42 28 137 113 236	6.2 4.6 3.8 3.6 2.6	4.9 2.3 1.2 .79 .64	.02 0 0 0		
16 17 18 19 20		0 0 0	.36 .39 .56 .64	0 0 0 0	1.2 2.5 1.2 1.0	130 85 118 48 52	77 50 38 28 64	2.4 2.1 1.9 1.7 1.4	.89 1.3 1.8 2.8 6.0	0 0 0		
21 22 23 24 25		00000	.39 .51 .74 1.2 1.2	0 0 0 0	1.5 4.6 8.4 19 37	40 34 37 34 34	88 39 27 22 19	1.3 1.3 1.1 1.1	5.0 4.7 6.6 3.9 1.7	0 0 0 0		
26 27 28 29 30 31		0 .03 .02 .04 .03	.74 .60 .47 .39 .29	0000	49 39 37 - -	31 31 30 38 36 46	16 14 19 22 14	.99 .89 .79 .74 .69	1.1 .84 .60 .43 .32	00000		

	Second-				Per	Ru	n-off
Month	foot-days	Maximum	Minimum	Mean	square mile	Inches	Acre-feet
October November December	0 .12 14.96	0 .04 1.2	0 0 .02	0 .004 .483	0 .000056 .0067	0 .00006 .008	0 .24 30
Calendar year 1936	4,504.35	450	0	12.3	.171	2.331	8,930
January Pebruary March April Hay June June July August September	.95 204.70 3,196 1,661 97.04 53.13 1.38 0	.20 49 321 236 10 6.6 .32	0 0 28 14 .64 .18 0	.031 7.31 103 55.4 3.13 1.77 .045 0	.00043 .102 1.43 .771 .044 .025 .00063	.0005 .106 1.649 .860 .051 .028 .0007	1.9 406 6,340 3,290 192 105 2.7 0
Water year 1936-37	5,229.28	321	. 0	14.3	.199	2.703	10,370

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages, measurements of flow were made at other points, as shown by the following table:

Miscellaneous discharge measurements in Snake River Basin during the water year October 1936 to September 1937

Mud Lake Basin, Idaho

Date		Stream	Tributary to or diverting from-	Locality	Discharge
July	2	Camas Creek	Mud Lake	NEISE; sec. 13, T. 11 N., R. 35 E., at former gaging station 2 miles north of Lone Tree Reservoir and S miles south of Kilgore.	Secft. 11.0
	2	do	do	Sec. 35, T. 11 N., R. 38 E., at former gaging station 600 feet below Lone Tree Reservoir and 102 miles south of Kilgore	9.45
	2	do	do	Sec. 26, T. 9 N., R. 36 E., at Ray Williams crossing, about 5 miles north-	1.76
	2	do	do	east of Camas. NE sec. 54, T. 9 N., R. 36 E., at former gaging station 1 mile east of Oregon Short Line railroad track and 42 miles northeast of Camas.	.3
			Big Lost Riv	er Basin, Idaho	
June 2	21	Big Lost River	Snake River	Sec. 4, T. 8 N., R. 22 E., at highway crossing about 12 miles south of	463
;	21	Big Lost River (left channel).	do	Chilly. Sec. 4, T. 8 N., R. 22 E., 200 feet below forks and about 12 miles south- east of Chilly.	230
2	21	Big Lost River, Back Channel (right channel).	do	Sec. 4, T. 8 N., R. 22 E., 600 feet below forks and about 12 miles south- east of Chilly.	106
2	23	Big Lost River	do	Sec. 14, T. 6 N., R. 25 E., at highway bridge about 2 miles southeast of Leslie.	234
\$	24	Swauger Canal	Big Lost River	Sec. 28, T. 7 N., R. 24 E., about 500 feet below the point of diversion from Big Lost River Slough and 4 mile south of Mackay.	8.89
\$	24	Rodgers Canal	do	Sec. 33, T. 7 N., R. 24 E., 150 feet	7.78
1	24	Harris & Vaught Canal.	do	River Slough and 1 mile south of Mackay. Sec. 34, T. 7 N., R. 24 E., 30 feet below point of diversion, about 12 miles south- east of Mackay.	1.13
2	23	Beck Canal	do	Sec. 14, T. 6 N., R. 25 E., about 1 mile southeast of Leslie.	10.2
1	23	East Side Canal.	do	Sec. 4, T. 5 N., R. 26 E., about 300 feet below point of diversion at Moore Dam, 31 miles north of Moore.	66.8
	23	Moore Canal (West Side Canal.	do	do	84.6
			Portneuf Rive	r Basin, Idaho	
Oct.	12	Birch Creek	Marsh Creek	Sec. 28, T. 12 S., R. 36 E., below power plant and above diversion to Devil Creek, 10 miles north of Malad.	7.83
Sept.	12 29	do	do	dodo	7.74 7.21
			Raft River	Basin, Idaho	
	19	Clear Creek	Raft River	SW ¹ / ₄ sec. 1, T. 14 N., R. 13 W., Salt Lake Base and Meridian, at former gaging station 2 miles south of Idaho-Utah State line and 4 miles south of Naf.	ļ
	21 19	do	do	dodo	6.2 42.8
July	7	do	do	dodo	*18.8
	26 5	do	do	dodo	7.1
	28	do	do	dodo	-85
June]	19	Ryan Ditch	Clear Creek	SWi sec. 1, T. 14 N., R. 13 W., Salt Lake Base and Meridian, immediately above gaging station on Clear Creek, 2 miles south of Idaho-Utah State line and 4 mile south of Naf.	3.5
*2.5	sec	ond-feet being div	erted above station.	VA MAAT	-1

^{*2.5} second-feet being diverted above station.

Miscellaneous discharge measurements in Snake River Basin during the water year October 1936 to September 1937--Continued

	Tribu	taries between Raft Ri	ver and Big Wood River, Idaho	
Date	Stream	Tributary to or diverting from-	Locality	Discharge
Oct. 15	Blue Lakes outlet.	Snake River	Swiswi sec. 28, T. 9 S., R. 17 E., at mouth, 4 miles north of Twin Falls.	Secft. 210
Jan. 30	do	do	dodo	515
May 8 June 8	do	do	dodo	200 190
July 14	•••••do•••••	do	dodo	188
Aug. 12	•••••do•••••	do	dodo	205
22	Clear Lakes outlet.	do	Sec. 2, T. 9 S., R. 14 E., at lake outlet above intake to power plant, about 5 miles north of Buhl.	510
		Big Wood Riv	er Basin, Idaho	•
June 3	West Fork of Fish Creek.	Fish Creek	Sec. 3, T. 1 N., R. 22 E., 15 miles above Fish Creek Dam and about 11 miles northeast of Carey.	*•70
July 26 Aug. 30	do	do	dodo	†•10 †•05
*Float †Estima	measurement.			
		Canvon Creek	Basin, Idaho	
Y 0		I		T
Mar. 8 Apr. 5	Ake Lateral No.1	Mountain Home feeder canal.	Sec. 36, T. 2 S., R. 6 E., at head 5 miles north of Mountain Home.	0
Apr. 27	do	do	dodo	0
May 4	••••••do•••••	do	do	0
10	do	do	dodo	0
June 14	do	do	dodo	1.45
July 28	•••••do•••••	do	dodo	1.25
Aug. 21	•••••do•••••	do	dodo	0
Sept. 1	••••••do•••••	do	dodo	0
22 Nov. 23	Ake Lateral No.2	do	dodo	0 *.25
Mar. 8	do	do	dodo	*.40
Apr. 5 27	•••••do•••••	do	do	*.50
May 4	••••••do•••••	do	dodo	5.05 6.76
10	do	••••••do•••••	dodo	4.64
June 14 29	••••••do•••••	do	dodo	2.16
29	do	do	dododo	2.28
July 28	do	do	do	2.46
Aug. 21 Sept. 1	••••••do•••••	do	dodo	2.04
22	do	do	dododo	2.18
Apr. 5 May 10	Ake Lateral No.3	do	dodo	0
June 14	do	do	dodo	0
29	•••••do•••••	do	dodo	0
July 28 Aug. 21	•••••do•••••	do	dodo	0
Sept. 1	•••••do•••••	••••••do•••••	dodo	0
22	do	do	do	0
*Estime	red.			
		Owyhee River	Basin, Oreg.	
June 28 28	Hooker Creek	Jordan Creek	Idaho-Oregon-Nevada highway crossing at Jordan Valley. Idaho-Oregon-Nevada highway crossing at	2.9
			Damer.	<u> </u>
		Boise River 1	Basin, Idaho	
0et. 13	Boise River	Snake River	SW1 sec. 29, T. 3 N., R. 3 E., 400 feet below Barber Dam, 1 mile southwest of Barber, and 5 miles southeast of Boise.	635
Nov. 7	do	do	dodo	54.0 63.8
1.3	do	do	dodo	43.3
30 Dec. 28	do	do	dodo	53.6 3.92
Jan. 28	do	do	dodo	73.4
Feb. 17	do	do	dodo	20.5
Mar. 13	do	do	dodo	14.6 8.44
15	•••••do•••••	do	dodo	427
29 Apr. 7	do	do	dodo	14.5 10.4
15	do	do	dodo	*7.5
Nov. 20	Fivemile Drain and feeder ditch.	Boise River	Mwd sec. 32, T. 4 N., R. 1 W., & mile above Phyllis Canal crossing and 32 miles west of Star.	14.7
Dec. 22	do	do	dodo	9.60
Jan. 29	do	do	dodo	7.78 11.0
	•••••••			1 20
Mar. 1 29 *Estims	do	do	dodo	5.60

Miscellaneous discharge measurements in Snake River Basin during the water year October 1936 to September 1937--Continued

Boise River Basin, Idaho--Continued

Date	Stream	Tributary to or diverting from-	Locality	Discharge
		diversing irom-		0 a et
Nov. 20	Tenmile Drain	Boise River	Sw sec. 5, T. 3 N., R. 1 W., 4 mile above Phyllis Canal crossing and 44 miles west of Star.	Secft. 5.37
Dec. 22 22	do	do	SW1 sec. 6, T. 3 N., R. 1 W., 1 mile below Phyllis Canal crossing and 4 miles northeast of Nampa.	4.29 4.74
Jan. 29 Mar. 1	do	do	dodo	4.09 3.20
29	do	do		2.58
Dec. 22	Purdam Drain	do	NW2 sec. 7, T. 3 N., R. 1 W., at Phyllis Canal crossing, 3 7/8 miles northeast of Namoa.	6.45
Nov. 20	do	do	NW4 sec. 7, T. 3 N., R. 1 W., \frac{1}{2} mile below Phyllis Canal crossing and 3\frac{3}{4} miles northeast of Nampa.	9.96
Dec. 22	do	do	do	8.77
Jan. 29 Mar. 1	do	do	dodo	8.75
29	do	do	dodo	7.31
Nov. 20	Meson Drain	do	NW2 sec. 23, T. 3 N., R. 2 W., 2 mile above Phyllis Canal crossing end 2 mile northeast of Nampa.	7.65
Dec. 22	do	do	do	6.70
Jan. 29 Mar. 1	do	do	dodo	6.31 3.91
29	do	do	do	5.05
Nov. 20	Indian Creek	do	NE sec. 22, T. 3 N., R. 2 W., at Phyllis Canal crossing, mile northeast of Nampa.	20.3
Dec. 22	do	do	dodo	18.4
Jan. 29 Mar. 1	do	do	dodo	15.7 15.6
29	do	do	dodo	12.6
Nov. 20	Elijah Drain	do	NET sec. 28, T. 3 N., R. 2 W., at Phyllis Canal crossing, 1 mile west of Nampa.	17.4
Dec. 22 Jan. 29	do	do	dodo	14.6 14.5
Mar. 1	do	do	do	15.7
29	do	do	dodo	15.0
Nov. 20	Wilson Drain	do	MW sec. 33, T. 3 N., R. 2 W., 22 miles above Phyllis Canal crossing and 1 7/8 miles southwest of Nampa.	18.6
Dec. 22	do	do	dodo	18.9
Jan. 29 Mar. 1	do	do	dodo	24.1 23.5
29	do	do	do	27.0
Nov. 20	do	do	SE ¹ / ₄ sec. 19, T. 3 N., R. 2 W., 1/8 mile above Phyllis Canal crossing 2 ¹ / ₂ miles west of Nampa.	28.1
Dec. 22	do	do	dodo	29.2
Jan. 29 Mar. 1	do	do	do	33.3 30.5
29	do	do	dodo	34.9
Nov. 20	Upper Embankment Drain.	do	SW2 sec. 24, T. 3 N., R. 3 W., 3/8 mile above Phyllis Canal crossing and 42 miles west of Nampa.	6.95
Dec. 22 22	do	do	SW1 sec. 24, T. 3 N., R. 3 W., 1 mile above Phyllis Canal crossing and 41 miles west of Nampa.	6.90 8.00
Jan. 29	do	do	dodo	9.16
Mar. 1	do	do	dodo	9.78 10.8
	1			1
Malheur River Basin, Oreg.				
Aug. 1	Malheur River	Snake River	Sec. 2. T. 17 S., R. 332 E., at Logan	15.0

Aug. 1	Malheur River	Snake River	Sec. 2, T. 17 S., R. 332 E., at Logan Valley.	15.0
June 1	do	do	Sec. 8, T. 19 S., R. 34 E.	118
July 3	do	do	Sec. 17, T. 19 S., R. 34 E.	39.1
Aug. 24	do	do	Sec. 31, T. 19 S., R. 34 E., at lower	7.3
24	do		Acton ranch.	
24	······do·····	do	Sec. 36, T. 19 S., R. 332 E., below Robbins ranch.	5.1
16	do	do	Sec. 11, T. 20 S., R. 34 E., above Ed.	13.5
12	do	do	Sec. 32, T. 21 S., R. 38 E., at Allen ranch.	106
23	do	do	dodo	138
Sept. 2	do	do	dodo	92.5
Aug. 16	Warmsprings Branch.	Cottonwood Creek	Sec. 4, T. 20 S., R. 36 E., at Altnow Ranch.	5,8
Nov. 13	Warmsprings Creek.	North Fork of Malheur River.	Sec. 36, T. 18 S., R. 37 E., above Agency Valley Reservoir.	4.0
May 17	Bully Creek	Malheur River	Sec. 4, T. 18 S., R. 40 E., at Becker- Looney diversion near Westfall.	9.9
13	do	do	Sec. 20, T. 18 S., R. 41 B., above Jenkins Ranch.	5.9

Miscellaneous discharge measurements in Snake River Basin during the water year October 1936 to September 1937--Continued

Malheur River Basin, OregContinued					
Dat	te	Stream	Tributary to or diverting from-	•	Discharge
					Secft.
June	29	Willow Creek	Malheur River	Sec. 25, T. 15 S., R. 42 E., alongside	0
	29	Beam Creek	do	highway, just below Brogan. Sec. 25, T. 14 S., R. 38 E., at highway crossing.	0
	24	South Willow Creek.	Willow Creek	Sec. 28, T. 14 S., R. 39 E., at John Day highway crossing near Ironside.	*1.0
	29	Cow Creek	do	Sec. 23, T. 14 S., R. 41 E., at highway crossing near Brogan. Sec. 27, T. 15 S., R. 42 E., at highway	0
	58	Pole Creek	do	Sec. 27, T. 15 S., R. 42 E., at highway crossing near Brogan.	0
*I	Estin	nated.			
_			Payette Riv	er Basin, Idaho	
July	26	Big Creek	North Fork of	Sec. 16, T. 13 N., R. 4 E., at highway	*12.5
	26	Clear Creek	Payette River.	crossing 4 miles southeast of Cascade. Sec. 33, T. 13 N., R. 4 E., at highway crossing about 1 mile above junction with North Fork of Fayette River and	*2.5
Mar.	18	Squaw Creek	Payette River	Sec. 17, T. 7 N., R. 1 E., about 1 mile above mouth and about 22 miles north-	862
	17	Unnamed creek	do	west of Montour. Sec. 24, T. 7 N., R. 1 W., 22 miles east of Black Canyon Dam and 6g miles northeast of Emmett.	1.94
*Es	stime	ited.			
			Weiser Riv	er Basin, Idaho	
June	6	Weiser River	Snake River	Sec. 12, T. 19 N., R. 1 W., below Upper Price Valley dam site, 3 miles north of Tamarack.	9.76
	25	do	do		10.4
July Sept	.13	Hornet Creek	Weiser River	Sec. 15, T. 16 N., R. 1 W., 300 feet above mouth and mile west of Council.	4.76 *.1
July	22	Little Weiser Irrigation District Canal.	Little Weiser River and an un- named tributary.	above mouth and a mile west of council. Sec. 22, T. 14 N., R. 1 W., immediately below C. Ben Ross Dam and 2 miles south of Indian Valley.	34.1
Aug. Apr.	20 18	Mann Creek	Weiser River	Sec. 24, T. 12 N., R. 5 W., at point where U. S. Highway 95 crosses Mann	24.6 119
*Es	et1me	ted.	l	Creek, 8 miles northeast of Weiser.	
		Tril	outaries between Malhe	ur and Burnt Rivers, Oreg.	
Aug.	11	Birch Creek	Snake River		.1
	11	Benson Creek	do	SW1 sec. 9, T. 15 S., R. 45 E., at highway crossing near Huntington. SW1 sec. 4, T. 15 S., R. 45 E., at highway crossing near Huntington.	.2
			1		
				Basin, Oreg.	
Apr.		Middle Fork of Burnt River.	Burnt River	NW sec. 22, T. 12 S., R. 36 E., at high- way bridge, above tributary from west near Unity.	1.9
June Apr.		do	do	NW2 sec. 22, T. 12 S., R. 36 E., below	3.2
	8	South Fork of Burnt River	do	near Unity. NW4 sec. 6, T. 13 S., R. 37 E., at highway bridge near Unity.	4.2
June	29 29	East Camp Creek.	Camp Creek	\	2.0
Aug.	29	West Camp Creek.	Burnt River	At highway bridge near Unity Mouth, at highway bridge near Unity Sec. 29, T. 12 S., R. 40 E., near highway	1.0
Apr.		Mill Creek	do	junction and Bridgeport.	1.4
Oct.		Pritchard Creek.	do	Sec. 20, T. 11 S., R. 43 E., adjacent to highway.	•05
Aug. Oct.		Alder Creek	Pritchard Creek	NET NT + sec. 20, T. 11 S., R. 43 E., at mouth.	Trace
4	15	Durkee Creek	Burnt River	NET sec. 29, T. 11 S., R. 43 E., at high- way crossing near Durkee.	.05
Aug.	11	Sisley Creek	do	SWNET sec. 30, T. 12 S., R. 44 E., at	0
	11	Dixie Creek	do	highway crossing near Durkee. NE asc. 16, T. 13 S., R. 44 E., at highway crossing near Durkee.	Trace
		L	L	1	

Miscellaneous discharge measurements in Snake River Basin during the water year October 1936 to September 1937 -- Continued

Powder River Basin, Oreg.

Date		Stream	Tributary to or diverting from-	Locality	Discharge
Apr.	8	Stices Gulch	Powder River	Mouth, in NE sec. 36, T. 10 S., R. 39	Secft. 2.2
Aug.	9	North Powder	do	SET sec. 22, T. 6 S., R. 39 E., at high- way crossing near North Powder.	.9
	9	Wolf Creek	North Powder River	NW sec. 14, T. 68., R. 39 E., at high- way crossing near North Powder.	Trace
	9	Jimmy Creek	do	NW sec. 12, T. 6 S., R. 39 E., at high- way crossing near North Powder.	Trace
			Salmon River	r Basin, Idaho	
Sept.	5	East Fork of South Fork of Salmon River.	South Fork of Salmon River.	About sec. 14, T. 18 N., R. 9 E., 150 feet above gage, 150 feet above mouth of Meadow Creek, and a mile northeast of Stibnite.	4.95
	5	Meadow Creek	East Fork of South Fork of Salmon River.	About sec. 14, T. 18 N., R. 9 E., at road bridge 50 feet above junction with East Fork of South Fork of Salmon River and b mile northeast of Stibnite.	6.13
July :		Johnson Creek diversion.	Johnson Creek	Sec. 23, T. 14, N., R. 7 E., about & mile below point of transmountain Johnson Creek-Deadwood River diversion, 9 miles south of Landmark ranger station, and 1: miles southeast of Knox.	ĺ
:	25 27	Boulder Creek	Little Salmon River	About sec. 16, T. 20 N., R. 1 W., about 2,000 feet upstream from head of trans- mountain diversion into Weiser River and 9 miles northwest of Tamarack.	·]
Sept.	9	do	do	Sec. 10, T. 20 N., R. 1 W., about 350 fer upstream from head of transmountain diversion into Weiser River and 9 miles northwest of Tamarack.	.85 et .85
			Grande Ronde Ri	iver Basin, Oreg.	
Oct. :		Fivepoint Creek.	Grand Ronde River.	Below Pelican Creek at highway crossing. Mouth, in SET sec. 31, T. 2 S., R. 37 E. near Hilgard.	0.1
	9	Pyles Creek	Catherine Creek	NW sec. 31. T. 4 S., R. 40 E., at high- way crossing near Union.	•2
Oct.	4	Pyles Creek, distributary of.	do	Sec. 19, T. 4 S., R. 40 E., adjacent to highway.	•8

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